AUTHOR INDEX

VOLUME 11

Abedallah, Nadia, 373
Abreu, Sergio L., 521
Actor, P., 760
Afzelius, H., 388
Akl, Kamal F., 909
Alford, Robert H., 84
Allen, Norris E., 661, 669
Altenbern, Robert A., 574, 906
Alexander, Gary A., 1087
Allison, Richard G., 251
Anderson, Raymond J., 411
Anderson, Scott V., 968
Andrews, Fred A., 615
Anhalt, John P., 651, 914
Arnold, Keith, 645
Arroyo, Julio, 21, 760
Asher, Yael, 919
Atkinson, Barbara, 541
Azuma, Keizo, 743

Bach, Vinh, 258
Bach, Vinh Toan, 912
Bak, A. Leth, 388
Ballard, Charles A., 688
Bannatyne, Robert M., 44
Barabas, G., 392
Baraff, Larry J., 933
Baron, S., 80
Barros, Facelucia, 1071
Barthelemy, Michel, 785
Basker, M. J., 956
Becker, Yeichiel, 919
Beggs, William H., 615
Berech, John, Jr., 234
Berendt, R. F., 1069
Berg, Claire, M., 968
Bernard, Betty, 688
Bill, Nancy J., 470
Birnbaum, Jerome, 725
Black, H. R., 809
Bodey, Gerald P., 74, 865, 1017
Booth, S. J., 712
Borgers, M., 500
Brier, G. L., 809, 813
Brion, Nils, 594
Britt, Michael R., 240
Brown, Arthur D., 821
Brown, W. J., 1064
Bryson, Yvonne J., 299
Buck, R. E., 324
Buckmire, Francis L. A., 1010
Buettner, Karen R., 1036
Burke, John P., 240
Busch, David F., 427
Buss, Richard F., 897
Butler, Thomas, 645
Byrd, Daniel M., 312

Calia, Frank M., 441
Carbon, Claude, 594
Carreira, José, 38
Cesario, Thomas C., 291
Chakrabarty, A. N., 1079
Chao, Lee, 161
Chao, Lian-Yu, 451
Chatterjee, Arun K., 897
Cheung, Rose, 38
Chiu, Peter J. S., 821
Cho, Dong Tâek, 209
Chow, Anthony W., 679
Chun, Doki, 209
Ciak, Jennie, 176
Clark, Virginia L., 871, 877
Clough, D. W., 307
Cohen, Yaffa, 919
Colding, Hanne, 214
Cole, M., 852
Cole, Donald R., 1033
Collins, M. S., 1049
Comber, K. R., 956
Contrepois, Alain, 594
Cosgrove, R. F., 31, 848
Counts, George W., 708
Courvalin, Patrice, 619
Craig, William A., 462
Crenshaw, R. R., 571
Crosa, Jorge H., 553
Crosby, Ruth, 826
Cundliffe, Eric, 491

Dankert, J., 1074
Darland, Gary, 725
Daschner, F., 1081
Dastidar, Sujata G., 1079
Davies, Julian, 491, 619
Dean, Evelyn, 171
De Clercq, Erik, 756
de Menezes, Jairo Perche, 331
De Nollin, Sonja, 500
Dessens-Kroon, M., 383
Deveikis, A., 817
Devlin, Hanna R., 47
Dhawan, Vijay, 64
Diaz, Carlos R., 965
Dillion, Hugh C., Jr., 1021
Dolak, L., 569
Dominik, J. W., 1069
Donoghue, Helen D., 34
Dougherty, Paula F., 225
Dowding, J. E., 47
Dowling, John N., 656
Duncan, I. B. R., 179

Ehret, Josephine M., 791
Eickhoff, Theodore C., 791
Elwell. Lynn P., 528
Engel, H. W. B., 925
Engel, Robert, 147
Engert, Jurgen, 1081
Espinel-Ingroff, Ana, 365
Eriksson, Bertil, 946
Evans, James B., 1077
Everett, E. Dale, 171
Eylan, Emanuael, 797

Fairbrother, J. E., 31
Falkow, Stanley, 528
Fanning, W. Lee, 712
Fathy, Shadia, 373
Faulkner, D. John, 411
Feldman, Rhoda I., 359
Felix, Haya, 202
Finegold, Sydney M., 427
Fisher, John F., 365
Flodström, Anders, 185
Foglesong, M. A., 174
Forsgren, Arne, 580
Fossieck, Byron E., Jr., 965
Frame, Peter T., 244
Freeman, K. B., 563
Fukuda, Shigemi, 51

Garcia-Cazares, Salvador J., 688
Garibaldi, Richard A., 240
Gerding, Dale N., 993
Glew, Richard H., 1036
Glotzbecker, Cheryl, 88
Goodwin, C. S., 26
Goossens, F., 500
Gordon, N., 773
Goyer, S., 638
Gray, Barry M., 1021
Greenberg, Joseph, 534
Gregory, David, 708
Griffith, R. S., 809, 813
Griffiths, A., 599
Gröschel, Dieter, 277
Guionie, Marlene, 785
Gump, Dieter W., 712
Gurwith, M., 780
Guze, Lucien B., 679

Haggerty, D. Lynne, 881
Hagiwara, Sumiko, 952
Hahn, Fred E., 176, 251
Hallander, Hans O., 185
Hamilton, Rebecca, 826
Hammerberg, S., 566
Harding, G., 780
Harik, Sami I., 909
Harrell, Lizzie J., 1077
Hasegawa, Mitsuto, 376
Hebertson, Richard M., 240
Hedges, R. W., 585
Heitz, Mary Ann, 858
Helgstrand, Erik, 946
Helsa, Mary Ann, 858

Henderson, David K., 679
Heseltine, Peter N. R., 427
Hewitt, William L., 768
Highsmith, Anita K., 449
Hill, Gale B., 625
Hill, Joyce P., 26
Hilmas, D. E., 80
Hirschman, Shalom Z., 118, 248, 369
Hoban, S., 780
Hoeprich, Paul D., 7
Hong, Jen-Shiang, 881
Hopfer, Roy L., 277, 248
Horne, Diane, 888
Hornick, Richard B., 441
Hubbell, Carol A., 1021
Huber, F. M., 455
Hui, J., 773

Iglewski, Wallace J., 1084
Isenberg, Henry D., 271
Ishikawa, Tomoaki, 999

Jackson, Andre, 331
Jackson, Roger T., 84
Jagdis, F., 780
Janik, Borek, 756
Jensen, Herluf, 214
Johansson, K. Nils Gunnar, 946
Johnson, J. K., 718
Johnson, Marcia, 171
Jones, P. M., 415
Jordan, George W., 7
Jorgensen, James H., 1087
Jorgensen, J. H., 415
Jouvenot, M., 581

Kajioka, R., 773
Kamimura, Toshiaki, 51
Kampmann, Jens P., 214
Kane, James G., 965
Kantor, Robert J., 126
Katz, Edward, 281
Katz, E., 1056
Katz, Ehud, 202
Kauffman, Carol A., 244
Keith, Alex, 98
Keller, Gregory, 98
Kilburn, James O., 534
Kirven, Linda A., 1004
Klein, Richard D., 559
Kobayashi, George S., 21, 154, 803
Koch, Patricia A., 462
Kondo, Isamu, 999
Kono, Yoko, 51
Kornguth, Margaret L., 974
Korzeniowski, Oksana M., 1071
Kotler-Brajburg, Janina, 803
Kozukue, Hiroyuki, 999
Kronenberg, L. H., 299
Kuehne, Ralph W., 92, 683
Kundsin, Ruth B., 267
Kumar, Ranajit, 1079
Kunin, Calvin M., 974
Kuwahara, Rie, 952
Kuwahara, Shogo, 13, 952

Labia, Roger, 785
Lamotte-Barrillon, Suzanne, 594
Larsson, Alf, 946
Lau, Curtis C., 462
LeBlanc, Barbara, 1017
Lee, Jean C., 1087
Lee, J. C., 415
Lee, Lanfong H., 753
Levy, H. B., 80
Levy, Louis, 122
Lieberman, Michael A., 881
Lin, Hsiu-san, 132
Linh, Nguyen Ngoc, 645
Leedom, J. M., 420
Long, James F., 821
Lopez, Carlos E., 441
Lorian, Victor, 541
Lucas-Lenard, Jean, 521
Luginbuhl, G. H., 559
Luthrop, Linda K., 553

MacGregor, Rob Roy, 110
Madsen, Paul O., 262
Maeda, Hiroshi, 941
Mahon, W. A., 359
Mahony, David E., 1067
Maldonado, Barbara, 858
Marks, M. I., 566
Marso, Eugene, 64
Martin, R. Russell, 407
Martin, William J., 64
Martins, Katia, 1071
Mason, K. T., 1056
Masson, Jean-Michel, 785
Masuda, Gohta, 376
Mata, Leonardo J., 553
Mathies, A. W., Jr., 420
Mathies, Allen W., 688
Matthews, Thomas R., 225
Matusiak, P. M., 735
Mauger, A. B., 1056
Mayer, Leonard W., 528
Mayo, Joan B., 844
McCarthy, Laurence R., 844
Medoff, Gerald, 21, 154, 760
Mellin, Hans-Eberhard, 262
Merati, Wilma, 396
Merigan, Thomas C., 122
Meyer, Richard D., 427
Meyers, Burt R., 118, 248, 369
Michel-Briand, Y., 589
Miller, Albert, 369
Miller, George H., 821
Miller, William A., 240
Mirhij, Najwa, 1027
Misiorny, Alfons, 946
Mitsuhasi, Susumu, 999
Mizak, S., 569
Mizen, M., 817
Moellering, Robert C., Jr., 1036
Moffatt, John G., 191, 198
Mogyoros, M., 362
Mogyoros, Miguel, 750
Møller, J. K., 388
Moore, Barbara A., 993
Moreschi, Gail, 609
Morgan, J. R., 362
Morgan, John R., 750
Mueller, Donna, 826
Muir, P., 780
Muñoz, Emilio, 38
Murakawa, Takeo, 1, 51, 1042
Murray, Patrick, R., 605
Myers, Martin G., 1027

Nakahara, Hideomi, 999
Nakamoto, Shoji, 51
Nakazawa, Atsushi, 219
Neuhaus, D. W., 638
Neuhaus, F. C., 638
Nishida, Minoru, 51, 1042
Nishiyama, Shinya, 198
Nitzan, Dorrit, 435
Nomura, Akio, 191
Norden, Carl W., 126
Nŏrén, Jan Olof, 946

Oberg, Bo, 946
O'Brien, William M., 132
Ogata, Jiro, 941
O'Grady, F., 585
Okada, Naohiko, 51
Olarte, Jorge, 553
Osborne, Christine D., 956
Overturf, G. D., 420, 933

Pan, Theresa, 74
Pannier, Wallace L., 92, 683
Pappagianis, D., 1050
Parenti, Francesco, 396
Parker, Richard H., 965
Parkhurst, J. Rodney, 307
Pato, Martin L., 318
Pearson, N. J., 585
Penaranda, Maria E., 553
Person, Stanley, 98
Peterson, Lance R., 993
Pestka, Sidney, 978
Pfeffer, Morris, 331
Phillipippon, Alain, 785
Phillips, Ian, 402
Philipson, Lennart, 946
Pieper, R. L., 455
Pitkin, D. H., 760
Poddar, Roma, 1079
Postic, Bosko, 656
Price, K. E., 324
Prusoff, William H., 312
Pugsley, Anthony P., 345
Pung, Juanito, 1033
Putman, Margaret, 407

Reading, C., 852
Reeves, Peter, 345
Regeur, Lisbeth, 214
Reib, E., 1081

Reiss, E., 1081
Renis, Harold E., 701
Rennie, R. P., 179
Riff, Louise J., 609
Riff, L., 817
Roberts, Marilyn, 528
Roberts, Robert J., 1027
Robertson, R. G., 735
Rocha, Heonir deJ., 1071
Ronald, A. R., 780
Rosenblatt, Jon E., 605
Rossomando, Edward F., 858
Roy, Ira, 258, 912
Rubinstein, Ethan, 577
Rugloski, Raymond J., 132
Ryan, D. M., 599
Ryan, Raymond, 114

Sabath, L. D., 1
Sachs, C., 760
Sakamoto, Hiroshi, 51
Sakamoto, Sadaaki, 941
Salstrom, Sara Jane, 698
Salyers, A. A., 142
Sammons, M. L., 80
Sande, Merle A., 1071
Santos, Luiz Carlos, 1071
Sarai, Yasunaga, 999
Sarosi, George A., 615
Sato, Kosaburo, 191, 198
Saunders, J. R., 339
Saunders, Priscilla P., 451
Sautter, R. L., 1064
Schaberg, Dennis R., 449
Schauf, V., 817
Scherr, George H., 459
Schimpff, Stephen C., 441
Schlessinger, David, 783
Schmeling, David, 580
Schmidt, L. H., 826
Schoen, Howard F., 234
Schryer, Patricia J., 291
Schwartzman, Joseph D., 695
Sebek, O. K., 569
Seno, E. T., 455
Seol, Sung Yong, 209
Shadomy, Smith, 229, 365
Shainberg, Bracha, 577
Shannon, Kevin, 402
Shimi, Ibrahim R., 373
Shlomai, Joseph, 919
Siegel, E. B., 675
Siminoff, Paul, 571
Sjövall, Jan, 185
Smetana, Ofire, 797
Smith, Anne, 402
Smith, J. A., 362
Smith, John A., 750
Snipes, Wallace, 98
Snyder, Merrill J., 441
Sofferman, Robert A., 712
Sokolski, W. T., 569
Somma, Sergio, 396
Sommer, Ronald G., 756
Sorger, S., 566
Sottile, William, II, 482
Spaepen, Moniek S., 267
Spratt, Bryan G., 161
Spyker, Daniel A., 132
Standiford, Harold C., 441
Stanisich, Vilma A., 589
Starr, Mortimer P., 897
Steinberg, Evan A., 933
Steinberg, E. A., 420
Stenberg, Kjell, 946
Stenderup, A., 388
Stening, Göran, 946
Stephen, E. L., 80, 1069
Stephen, Edward L., 92, 683
Stevens, Paul, 768
Stewart, Dorothy, 865, 1017
Stridh, Stig, 946
Stringfellow, Dale A., 984
Stroman, D. W., 569
Sutherland, R., 956
Suzuki, Nobuo, 219
Sykes, R. B., 339, 529
Szabo, G., 392

Tak, Ryonbin, 209
Tamada, Terumi, 219
Tan, James S., 698
Tang, Chu-Tay, 147
Tatem, Beverly A., 441
Taylor, William, 98
Thadepalli, Haragopal, 258, 912
Thomas, Frank E., 84
Thoné, F., 500
Thornsberry, Clyde, 1004
Thrupp, Lauri D., 688
Tilles, Jeremiah G., 291
Tilton, Richard C., 114, 271
Tomasz, Alexander, 888
Tomioka, Susumu, 376
Tropp, Burton E., 147
Turck, Marvin, 708

Uchica, Hiroshi, 376
Underman, A. E., 420
Underwood, Gerald E., 765
Uwaydah, Marwan, 909

Van Belle, H., 500
van Embden, J. D. A., 383, 925
van Klingeren, B., 925
van Klingeren, V., 383
Vann, Robert L., 132
Vaughn, Dennis, 826
Venezia, Richard A., 735
Vialard, J. L., 585

Wachsmuth, Ina K., 449
Wagner, Gerald E., 229
Waitz, J. Allan, 821
Walker, Clay B., 435
Walker, J. S., 1069
Walter, Harry, 978
Wang, Ching Yung, 753
Wang, Wen Lan Lou, 171
Wang, Wen-Lan L., 695
Washington, John A., II, 470
Watanakunakorn, Chatrchai, 88, 1007
Wayne, Lawrence G., 978
Wee, Siok-Hui, 914
Weed, Sheldon D., 765
Wehrle, P. F., 420
Wehrle, Paul F., 688
Weinberg, Miriam, 797
Weinberg-Zahlering, Eynat, 919
Welling, Peter G., 262, 462
Westhead, Jack E., 919
Wilkins, Jeanette, 933
Wilkins, J., 420
Wilkins, Tracy D., 435
Wilkins, T. D., 142, 718
Williams, J. A., 514
Williams, Jimmy C., 475
Williams, W. Kenneth, 281
Williams, W. K., 1056
Wilson, Samuel Z., 407
Winkelhake, Jeffrey L., 1010
Wold, John S., 105
Wolfe, Margaret S., 411
Wolny, J. D., 809, 813
Woltjes, J., 1074
Wong, J., 142
Woodman, Daniel R., 475
Wratten, Stephen J., 411
Wüst, Jürg, 631

Ximenes, Jose, 331

Yamada, Yasuo, 743
Yamamoto, Tatsuo, 936
Yamanaka, Toshihiko, 198
Yokota, Takeshi, 13, 936, 952
Yokota, Yoshiko, 51
Yotter, David W., 225
Young, Frank E., 871, 877
Young, Lowell S., 768

Zabransky, R. J., 482
Zachariae, H., 388
Zajac, I., 760
Zeleznik, Dolores, 708
Zinneman, Horace H., 993

SUBJECT INDEX

VOLUME 11

Acinetobacter calcoaceticus
carbenicillin and aminocyclitols, 1036
Actinomycin D
S. parvulus, 281
Actinomycins
cis- and *trans*-4-methylproline incorporation, 1056
Adenine arabinoside
antiviral effects, 299
with interferon, 299
Adenine arabinoside 5-monophosphate
antiviral effects, 299
with interferon, 299
Allicin
antifungal activity, 743
6β-Amidinopenicillanic acid, 161
Amikacin
aminoglycoside phosphotransferase, 619
compared with netilmicin, 64
dialysis, 214
distribution in rabbit tissue, 974
interstitial fluid, 698
in vitro activity 126, 791
penetration into exudate fluid, 110
pharmacokinetics, 214
pharmacokinetics in infants, 933
tissue distribution in children, 1081
2-Amino-5-bromo-6-methyl-4-pyrimidinol (U-25, 166)
antiviral properties, 984
interferon induction, 984
Aminoglycoside phosphotransferase
amikacin, 619
Aminoglycosidic amino cyclitols
synergy with carbenicillin, 1036
A. calcoaceticus, 1036
6-Aminopenicillanic acid
P. mirabilis, 541
E. coli, 541
S. aureus, 541
Amoxicillin
acute urinary infection, 780
dose dependence, 132
Amphotericin B
antioxidants, 615
aspergillosis, 21
Bactec system, 277
bioactivity, 615
bioassay method, 31
C. immitis, 1049
dose response, 803
effects on macrophages, 154
filipin, 803
HeLa cells, 803
microassay, 44
yeasts, 277
Ampicillin
anti R-plasmid compounds, 176
H. influenzae, 559
H. influenzae MICs, 114
resistance 553, 1021
Salmonella (nontyphoid), 577
S. dysenteriae, 553
Shigella, 577
S. typhimurium, 176
Anaerobe growth
four commonly used media, 482
Anaerobes
cefoxitin susceptibility, 912
ticarcillin, 258
2,2'-Anhydro-1-β-D-arabinofuranosylcytosine
acyl derivatives, 191
antiviral activity, 191
encephalitis, 198
Antibiotic susceptibility test device
performance parameters, 271
Anti-R-plasmid compounds
ampicillin, 176
S. typhimurium, 176
Antiviral compounds
indirect mouse model, 683
Venezuelan equine encephalomyelitis virus, 603
1-β-D-arabinofuranosyl cytosine
acyl derivatives, 191
antiviral activity, 191
Aspergillosis
amphotericin B therapy, 21
5-fluorocytosine, 21
rifampin therapy, 21
Atebrin
effect on bacterial membrane ATPases, 38
Autobac-1 susceptibility testing
evaluation, 750

Bacillus subtilis
D-cycloserine resistance, 871
transport of D-alanine and glycine, 877
Bactec system
amphotericin B, 277
yeasts, 277
Bacteriocin production
Bacteroides, 718
feces, 718
Bacteriophage T4*td*8rII
5-iodouracil, 312
Bacteriuria
catheter-associated, 240
Bacteroides
bacteriocin production, 718
Bacteroides fragilis
chemotherapy, 435
Bacteroides fragilis subsp. *fragilis*
synergy between cefamandole and erythromycin, 813
Bacteroides melaninogenicus
β-lactamase, 142
penicillin resistance, 605

penicillinase production, 605
Bacteroides oralis
β-lactamase, 142
BL-20803
analogues, 571
interferon, 571
leukocytes, 571
BL-P1624
P. aeruginosa, 441
Bioassay method
for polyene antibiotics, 31
Bone marrow toxicity
5-fluorocytosine, 244
Broad-spectrum penicillin
mezlocillin,74

Cairomycin B, 373
Carbenicillin
anaerobes, 258
interstitial fluid, 698
meningitis, 420
P. aeruginosa, 1, 441, 589
serum, 698
versus ampicillin, 420
versus ticarcillin, 258
Catheter-associated bacteriuria
prophylaxis, 240
Cefaclor
in vitro activity, 470
versus cephalexin and cephradine, 470
Cefadroxil
broad-spectrum cephalosporin, 324, 331
versus cephalexin and cephadrine, 331
Cefamandole
B. fragilis subsp. *fragilis*, 813
erythromycin synergy, 813
interstitial fluid penetration, 594, 698
pharmacokinetics, 248, 262
probenecid, 809
renal failure, 248, 262
serum, 698
spinal fluid penetration, 933
S. typhi, 369
Cefazaflur
in vitro studies, 708
Cefazolin
analysis of serum levels, 105
bactericidal activity, 1037
exudate levels, 1037
interstitial fluid, 594, 698
liquid chromatography (high pressure), 105
pleural fluid, 1033
rat granuloma system, 1037
serum, 698
Cefazolin sodium
distribution in rabbit tissues, 760
Cefoxitin
anaerobe susceptibility, 679, 912
B. fragilis, 725
clinical evaluation, 427
K. pneumoniae, 84
β-lactamase resistance, 725
lysis of enterobacteria, 26
Cefuroxime
H. influenzae, 599

Cephadrine
in vitro activity, 470
penetration into cerebrospinal fluid, 909
versus other cephalosporins, 331, 470
Cephalexin
in vitro activity, 470
versus other cephalosporins, 331, 470
Cephaloridine
interstitial fluid penetration, 594
Cephalosporin
cefadrozil, 324
cefazaflur, 708
cephadrine, 331
cephalexin, 331
FR 10024, 51
horse serum, 174
stability, 174
Cephalothin
interstitial fluid, 698
serum, 698
Cerulenin
cell inhibition, 574
inhibition of staphylococcal enterotoxin A and B, 906
S. aureus, 574
Chemotaxis
antibiotics, 580
leukocytes, 580
Chloramphenicol
H. influenzae, 383
nontyphoid *Salmonella*, 577
plasmid-mediated resistance, 383
Shigella, 577
Chloramphenicol acetyltransferase
cyclic adenylic acid, 952
E. coli, 952
D-chloramphenicol
N-trifluoroacetyl analogue, 563
Chlorhydroxyquinoline
rapid microbiological assay, 848
Cinoxacin
nontyphoid *Salmonella*, 577
Shigella, 577
Clavulanic acid
β-lactamase-inhibiting β-lactam, 852
S. clavuligerus, 852
Closed circular deoxyribonucleic acid
anti-R-plasmid drugs, 251
intercalation, 251
primaquine, 251
superhelical density, 251
Clostridium perfringens
bacteriocins, 1067
mitomycin, 1067
susceptibility to twenty antibiotics, 695
Coccidioides immitis
amphotericin B, 1049
Colicin B-K260
characterization, 345
purification, 345
Colicin D-CA23
characterization, 345
purification, 345
Colicin E1 induction
glucose requirements, 219

Colicin K
ecf mutant, 881
E. coli, 881
energy-coupling factor, 881
Cyclic adenylic acid
chloramphenicol acetyltransferase, 952
E. coli, 952
D-Cycloserine
B. subtilis, 871
inducible resistance, 871
transport of D-alanine and glycine, 877
Cytomegalovirus
susceptibility to human interferon, 656

3-Deazauridine
Japanese B encephalitis virus, 475
with 3-deoxy-D-glucose, 475
2-Deoxy-D-glucose
Japanese B encephalitis virus, 475
with 3-deazauridine, 475
5,6-Dihydro-5-azathymidine
herpes simplex virus, 765
Doxycycline
bioavailability, 462
Drug resistance plasmids
in *S. typhi*, 209

Encephalitis
2,2′-anhydro-1-β-D-arabinofuranosylcytosine, 198
HSV-1, 307
trifluoromethyl-2′-deoxyuridine, 307
Enterobacteria
lysis by cefoxitin, cefuroxime, and cephalothin, 26
Equine encephalitis virus
tilorone hydrochloride, 92
Erwinia amylovora
barrier function of cell envelope, 897
Erythrocyte damage
measurement, 675
polyene antibiotics, 675
Erythromycin
B. fragilis subsp. *fragilis*, 813
cefamandole synergy, 813
S. aureus, 407
Escherichia coli
altered surface properties, 978
6β-amidinopenicillanic acid derivatives, 161
amino acid transport, 968
6-aminopenicillanic acid, 541
cephalosporins, 933
colicin K, 881
ecf mutant, 881
energy-coupling factor, 881
inhibition by D-norvalyl-D-alanine, 638
β-lactam antibiotics, 968
β-lactamase-directed barrier, 936
mecillam, 541
mercury resistance, 999
morganocin, 514
nalidixic acid, 167
penicillins, 936
protein alterations, 167
R-plasmids, 936
streptomycin-resistant mutants, 978
Ethanbutol
M. smegmatis, 534

Filipin
dose response, 803
HeLa cells, 803
L cells, 803
5-Fluorocytosine
aspergillosis, 21
bone marrow toxicity, 244
gas chromatographic determination, 914
5-Fluorouracil
growth inhibition of *S. fimicola*, 234
FR 10024
cephalosporin derivative, 51

Gardimycin
peptidoglycan synthesis inhibitor, 396
Genital HSV-2
chemotherapy, 701
L-Glyceraldehyde 3-phosphate
bactericidal agent, 147
Gentamicin
assay by high-pressure liquid chromatography, 651
compared with netilmicin, 64
distribution in rabbit tissue, 974
hemagglutination inhibition assay, 359
interstitial fluid, 698
in vitro activity, 126, 791
new assay procedure, 1074
P. aeruginosa, 441
penetration into exudate fluid, 110
serum, 698
versus netilmicin, 118, 402, 609
with pirbenicillin, 441
with tobramycin, 88
Gentamicin resistance
Klebsiella, 179
S. aureus, 47
Haemophilus influenzae
ampicillin, 114, 559, 599
ampicillin-resistant, 1021
bactericidal factor, 735
cefuroxime, 599
chloramphenicol, 383
penicillinase paper strip test, 1087
plasmid, 383
plasmid-specified β-lactamase gene, 339
susceptibility testing, 1021
Haemophilus parainfluenzae
antimicrobial susceptibility, 844
HeLa cells
amphotericin B, 803
filipin, 803
Hemagglutination inhibition assay
gentamicin, 359
Herpes simplex virus
cutaneous, 765
5,6-dihydro-5-azathymidine, 765
herpetic keratitis, 797
inhibition by polyinosinic acid-polycytidylic acid, 797
Herpes simplex virus type 1
encephalitis, 307
5-trifluoromethyl-2′-deoxyuridine, 307
Herpes simplex virus type 2
chemotherapy, 701
genital, 701

High-pressure liquid chromatography cefazolin analysis, 105
Horse serum
cephalosporins, 174
Hydroxamic acids
antibacterial activity, 753
mutagenicity, 753
Hypoxanthine arabinoside
antiviral effect, 299
with interferon, 299

Influenza virus
Ribavirin triphosphate, 946
RNA polymerase, 946
Interferon
antiviral effects, 299
BL 20803 analogues, 571
cytomegalovirus, 656
human, 291
human fibroblast cultures, 299
5-Iodouracil
phage T4*td*8*r*II, 312
Ionenes
interferon induction, 756
poly(inosinic acid)·poly(cytidylic acid), 756
Isatin β-thiosemicarbazone
HeLa cells, 202
vaccinia viral antigens, 202

Japanese B encephalitis virus
3-deazauridine, 475
2-deoxy-D-glucose, 475
Josamycin
S. aureus, 407

Kanamycin
in vitro activity, 791
Klebsiella pneumoniae
cefoxitin activity, 84
multiple resistance, 84
Klebsiella
gentamicin resistance, 179

β-Lactam antibiotics
amino acid transport, 968
bactericidal activity, 376
bacteriostatic activity, 376
E. coli, 968
β-Lactamase
barrier for penicillins and cephalosporins, 936
B. melaninogenicus, 142
B. oralis, 142
carbenicillin-resistant, 785
E. coli, 936
gene transfer by *N. gonorrhoeae*, 1004
H. influenzae, 339
N. gonorrhoeae, 528
P. aeruginosa, 785
plasmid-specified, 399
R plasmids, 936
β-lactamase production
N. gonorrhoeae, 528
β-Lactams
S. sanguis, 888
L cells
amphotericin B, 803
filipin, 803
Leukocytes
antibiotics, 580
chemotaxis, 580
Lipid-containing viruses
inactivation by long-chain alcohols, 98

Macrolide resistance
S. aureus, 661, 669
Macromycin
bactericidal activity, 1010
Macrophages
amphotericin B, 154
Marine pseudomonad
antibiotic metabolites, 411
Mecillam
P. mirabilis, 541
E. coli, 541
S. aureus, 541
Megacin C, 34
Megacin Cx, 34
Membrane ATPases
effect of atebrin, 38
Mercury resistance
E. coli, 999
R-plasmids, 999
Methicillin
against enterococci, 88
combined with gentamicin and tobramycin, 88
3-Methyleneoxindole
cellular protein synthesis, 521
viral protein synthesis, 521
Metronidazole
anaerobes, 631, 679
Mezlocillin
broad-spectrum penicillin, 74
Miconazole
bioassay, 365
yeasts, 500
Minocycline
mixed anaerobic infection, 625
side effects, 712
Mitomycin C
bacteriocins, 1067
C. perfringens, 1067
Morganocin
E. coli, 514
plasmid, 514
production, 514
Proteus, 514
Mycobacteria
rifampin, 773
Mycobacterium chelonei
radiometric susceptibility test, 763
Mycobacterium leprae
polyinosinic-polycytidylic acid, 122
Mycobacterium smegmatis
ethambutol, 534

Nafcillin
absorption, 965
cerebrospinal fluid, 965
enterococci, 88
with gentamicin and tobramycin, 88
Nalidixic acid
E. coli

protein alterations, 167
Neisseria gonorrhoeae
β-lactamase production, 528, 1004
Neocarzinostatin
accumulation in bladder tissue, 941
Netilmicin
antibacterial activity, 402
^{125}I radioimmunoassay, 768
in vitro activity, 126, 791, 1017
renal pharmacology, 821
versus amikacin, 64
versus gentamicin, 64, 118, 402, 609
versus gisomicin, 118
versus tobramycin, 64, 118, 609
D-Norvalyl-D-alanine
inhibition of *E. coli*, 638
Nystatin
Bioassay method, 31

Ornidazole
anaerobes, 631
Oxacillin
combined with gentamicin and tobramycin, 88

Penicillin
anaerobes, 258
mezlocillin, 74
S. griseus, 392
streptomycin production, 392
versus ticarcillin, 258
Penicillinase paper strip test
H. influenzae, 1087
Penicillinase production
B. melaninogenicus, 605
Penicillin G
pentration into exudate fluid, 110
protein interactions, 993
Penicillin resistance
B. melaninogenicus, 605
Peptidoglycan synthesis
gardinycin, 396
inhibition, 396
Pirbenicillin
P. aeurginosa, 1, 441
versus carbenicillin, 441
with gentamicin, 441
Polyene antibiotics
bioassay method, 31
erythrocyte damage, 675
Polyinosinic-polycytidylic acid
M. leprae, 122
Poly(inosinic acid)·poly(cytidylic acid)
antiviral properties, 984
interferon induction, 756, 984
ionenes, 756
Probenecid
cefamandole, 809
Propionibacterium acnes
susceptibility to seventeen antibiotics, 171
Proteus
morganocin, 514
Proteus mirabilis
6-aminopenicillanic acid, 54
mecillam, 541

Pseudomonas aeruginosa
carbencillin resistance plasmid, 589
carbenicillin-resistant, 785
five-hour minimal inhibitory concentration test, 1064
in vitro activity of antibiotics, 1
β-lactamase, 785
susceptibility test medium, 415
ticarcillin, 956
tobramycin, 956

Radiometric susceptibility test
M. chelonei, 763
Renal failure
cefamandole, 248, 262
Ribavirin
influenza virus, 1069
intraperitoneal versus aerosol administration, 1069
Ribavirin triphosphate
inhibition of influenza virus RNA polymerase, 1069
Rifampin
aspergillosis, 21
permeability barrier in mycobacteria, 773
R plasmids
E. coli, 936
temperature-sensitive, 13
V. cholerae, 13, 585, 1079
Rubidium efflux
bioassay method for polyene antibiotics, 31

Salmonellae
in vitro antibiotic susceptibility, 1071
Salmonella (nontyphoid)
ampicillin, 577
chloramphenicol, 577
cinoxacin, 577
Salmonella typhi
cefamandole, 369
Salmonella typhi
drug resistance plasmids, 209
Salmonella typhimurium
ampicillin, 176
anti-R-plasmid compounds, 176
Serratia mercescens
resistance plasmids, 449
urine, 449
Shigella
ampicillin, 577
chloramphenicol, 577
cinoxacin, 577
Shigella dysenteriae type 1
ampicillin resistance, 553
R-plasmid, 553
Sisomycin
versus netilmicin, 118
Sordaria fimicola
5-fluorouracil inhibition, 234
Staphylococcal enterotoxin B and C
cerulenin inhibition, 906
Staphylococci
effect of anaerobiosis on antimicrobial susceptibility, 1077

Staphylococcus aureus
6-aminopenicillanic acid, 541
cerulenin inhibition, 574
erythromycin, 407
gentamicin, 47
josamycin, 407
macrolide resistance, 661, 669
mecillam, 541
nasal carriage, 407
susceptibility to newer antibiotics, 7
Streptococcal infection
antimicrobial therapy, 817
group B, 817
Streptococci (group B)
antimicrobial therapy, 817
Streptococci (group D)
drug resistance, 925
Streptococcus sanguis
β-lactams, 888
Streptomyces clavuligerus
clavulinic acid, 852
β-lactamase-inhibiting β-lactam, 852
Streptomyces griseus
penicillin effect, 392
streptomycin production, 392
Streptomyces parvulus
actinomycin D, 281
Streptomycin
S. griseus production, 392
penicillin, 392
resistant *E. coli*, 978
Susceptibility test medium
P. aeruginosa, 415
Synergy of antimicrobials
microdilution transfer plate technique, 225

Temperature-sensitive R plasmid
from drug-resistant *V. cholerae*, 13
Tetracycline
bioavailability, 462
DNA replication, 318
membrane properties, 318
mixed anaerobic infection, 265
plasmid-mediated drug resistance, 338
4-Thiouracil
microbial formation, 569
Ticarcillin
anaerobic susceptibility, 258, 679
Enterobacteriaceae, 956
interstitial fluid, 698
P. aeruginosa, 1, 956
serum, 698
versus carbenicillin, 258
versus penicillin, 258
Tilorone hydrochloride
antiviral properties, 984
evaluation of analogues, 92
interferon induction, 984
Venezuelan equine encephalitis virus, 92
Tinidazole
anaerobes, 631
Tobramycin
Enterobacteriaceae, 956
interstitial fluid, 698
in vitro activity, 791
maternal-fetal pharmacology, 688
P. aeruginosa, 956
serum, 698
synergy with ticarcillin, 956
versus netilmicin, 118
Trichothecene fungal toxins
eukaryotic protein synthesis, 491
5-Trifluoromethyl-2′-deoxyuridine
encephalitis, 307
HSV-1, 307
Tylosin
biosynthesis, 455
Typhoid fever
antimicrobial resistant, 645

Ureaplasma urealyticum
susceptibility testing, 267
Urinary infection
anoxicillin, 780

Vaccinia viral antigens
HeLa cells, 202
isatin β-thiosemicarbazone, 202
synthesis, 202
Venezuelan equine encephalomyelitis virus
indirect mouse model, 683
tilorone hydrochloride, 92
Vibrio cholerae
Asian strains, 585
R plasmids, 585, 1079
Vibrio cholerae (El Tor)
temperature-sensitive drug plasmid, 13

Yeasts
amphotericin B, 277
Bactec system, 277
miconazole, 500
Yersinia enterocolitica biotype 4, serotype O:3
microbial susceptibility, 566

INDEX TO DATE OF ISSUE

Month	Date of Issue	Pages
January	24 January 1977	1–178
February	22 February 1977	179–372
March	29 March 1977	373–576
April	5 May 1977	577–771
May	26 May 1977	773–923
June	20 June 1977	925–1089

Volume 11 **Contents for January** Number 1

Biosynthesis; Chemistry; Mechanisms of Action and Resistance

Lysis of Enterobacteria by Cefoxitin, Cefuroxime, and Cephalothin. C. S. Goodwin* and Joyce P. Hill 26

Production of Megacins C and Cx: Presumptive Evidence of Extrachromosomal Control. Helen D. Donoghue 34

Effect of Atebrin on Bacterial Membrane Adenosine Triphosphatases in Relation to the Divalent Cation Used as Substrate and/or Activator. José Carreira and Emilio Muñoz* 38

Mechanisms of Gentamicin Resistance in *Staphylococcus aureus*. J. E. Dowding* 47

Inactivation of Lipid-Containing Viruses by Long-Chain Alcohols. Wallace Snipes,* Stanley Person, Gregory Keller, William Taylor, and Alex Keith 98

L-Glyceraldehyde 3-Phosphate, a Bactericidal Agent. Chu-Tay Tang, Robert Engel, and Burton E. Tropp* 147

Comparison of the Binding Properties of Two 6β-Amidinopenicillanic Acid Derivatives That Differ in Their Physiological Effects on *Escherichia coli*. Brian G. Spratt 161

Nalidixic Acid-Induced Protein Alterations in *Escherichia coli*. Lee Chao 167

Bactericidal Effects of Combinations of Ampicillin with Anti-R-Plasmid Compounds on *Salmonella typhimurium* R1$^+$. Fred E. Hahn* and Jennie Ciak 176

Physiological Effects and Microbial Susceptibility

Comparative In Vitro Activity of Pirbenicillin, Ticarcillin, and Carbenicillin Against *Pseudomonas aeruginosa*. Takeo Murakawa and L. D. Sabath* 1

Susceptibility of Three Groups of *Staphylococcus aureus* to Newer Antimicrobial Agents. George W. Jordan* and Paul D. Hoeprich 7

Temperature-Sensitive R Plasmid Obtained from Naturally Isolated Drug-Resistant *Vibrio cholerae* (Biotype El Tor). Takeshi Yokota* and Shogo Kuwahara 13

Bioassay Method for Polyene Antibiotics Based on the Measurement of Rubidium Efflux from Rubidium-Loaded Yeast Cells. R. F. Cosgrove and J. E. Fairbrother 31

Microassay for Amphotericin B. Robert M. Bannatyne,* Rose Cheung, and Hanna R. Devlin 44

In Vitro Studies with Netilmicin Compared with Amikacin, Gentamicin, and Tobramycin. Vijay Dhawan, Eugene Marso, William J. Martin, and Lowell S. Young* 64

Mezlocillin: In Vitro Studies of a New Broad-Spectrum Penicillin. Gerald P. Bodey* and Theresa Pan 74

Cefoxitin Activity Against Multiply Antibiotic-Resistant *Klebsiella pneumoniae*. Roger T. Jackson,* Frank E. Thomas, and Robert H. Alford 84

Comparative In Vitro Activity of Nafcillin, Oxacillin, and Methicillin in Combination with Gentamicin and Tobramycin Against Enterococci. Chatrchai Watanakunakorn* and Cheryl Glotzbecker 88

Rapid Method for Determining the Minimum Inhibitory Concentration of Ampicillin for *Haemophilus influenzae*. Raymond Ryan and Richard C. Tilton* . 114

* Asterisk refers to person to whom inquiries regarding the paper should be addressed.

Antimicrobial Activity In Vitro of Netilmicin and Comparison with Sisomicin, Gentamicin, and Tobramycin. BURT R. MEYERS AND SHALOM Z. HIRSCHMAN* 118

In Vitro Activity of Netilmicin, Gentamicin, and Amikacin. ROBERT J. KANTOR AND CARL W. NORDEN* 126

Beta-Lactamase Activity in Strains of *Bacteroides melaninogenicus* and *Bacteroides oralis*. A. A. SALYERS,* J. WONG, AND T. D. WILKINS 142

Effects of Amphotericin B on Macrophages and Their Precursor Cells. HSIU-SAN LIN,* GERALD MEDOFF, AND GEORGE S. KOBAYASHI 154

Susceptibility of *Propionibacterium acnes* to Seventeen Antibiotics. WEN LAN LOU WANG,* E. DALE EVERETT, MARCIA JOHNSON, AND EVELYN DEAN 171

Pharmacology and Therapeutics

Therapy of Murine Aspergillosis with Amphotericin B in Combination with Rifampin or 5-Fluorocytosine. JULIO ARROYO, GERALD MEDOFF,* AND GEORGE S. KOBAYASHI 21

Laboratory Evaluation of FR10024, a New Cephalosporin Derivative. MINORU NISHIDA,* TAKEO MURAKAWA, TOSHIAKI KAMIMURA, NAOHIKO OKADA, SHIGEMI FUKADA, HIROSHI SAKAMOTO, SHOJI NAKAMOTI, YOSHIKO YOKOTA, AND YOKO KONO 51

Interferon Induction in Cynomolgus and Rhesus Monkeys After Repeated Doses of a Modified Polyriboinosinic-Polyribocytidylic Acid Complex. M. L. SAMMONS, E. L. STEPHEN,* H. B. LEVY, S. BARON, AND D. E. HILMAS 80

Evaluation of Various Analogues of Tilorone Hydrochloride against Venezuelan Equine Encephalitis Virus in Mice. RALPH W. KUEHNE,* WALLACE L. PANNIER, AND EDWARD L. STEPHEN 92

Rapid Analysis of Cefazolin in Serum by High-Pressure Liquid Chromatography. JOHN S. WOLD 105

Comparative Penetration of Amikacin, Gentamicin, and Penicillin G into Exudate Fluid in Experimental Sterile Peritonitis. ROB ROY MACGREGOR 110

Inhibition of Multiplication of *Mycobacterium leprae* by Polyinosinic-Polycytidylic Acid. LOUIS LEVY AND THOMAS C. MERIGAN* 122

Pharmacokinetics of Amoxicillin: Dose Dependence After Intravenous, Oral, and Intramuscular Administration. DANIEL A. SPYKER,* RAYMOND J. RUGLOSKI, ROBERT L. VANN, AND WILLIAM M. O'BRIEN 132

Stability of Cephalosporins in Horse Serum. M. A. FOGLESONG 174

Errata

New Method for Detecting In Vitro Inactivation of Penicillins by *Haemophilus influenzae* and *Staphylococcus aureus*. WIE-SHING LEE* AND LOUIS KOMARMY 178

Antibiotic Resistance Among Coliform and Fecal Coliform Bacteria Isolated from Sewage, Seawater, and Marine Shellfish. MARYLYN D. COOKE 178

Antibiotic Resistance Among Coliform and Fecal Coliform Bacteria Isolated from the Freshwater Mussel *Hydridella menziesii*. MARYLYN D. COOKE 178

Inhibition of *Neisseria gonorrhoeae* by a Bacteriocin from *Pseudomonas aeruginosa*. STEPHEN A. MORSE,* PATRICK VAUGHAN, DEANNE JOHNSON, AND BARBARA H. IGLEWSKI 178

Volume 11

Contents for February

Number 2

Biosynthesis; Chemistry; Mechanisms of Action and Resistance

Synthesis of Vaccinia Viral Antigens in HeLa Cells in the Presence of Isatin Beta-Thiosemicarbazone. EHUD KATZ* AND HAYA FELIX 202

Requirements of Glucose and Incubation Under Static Conditions for Optimal Colicin E_1 Induction. ATSUCHI NAKAZAWA,* NOBUO SUZUKI, AND TERUMI TAMADA 219

Prevention of 5-Fluorouracil-Caused Growth Inhibition in *Sordaria fimicola*. HOWARD F. SCHOEN* AND JOHN BERECH, JR. 234

Changes in Superhelical Density of Closed Circular Deoxyribonucleic Acid by Intercalation of Anti-R-Plasmid Drugs and Primaquine. RICHARD G. ALLISON AND FRED E. HAHN* 251

Development of a Chemically Defined Medium for the Synthesis of Actinomycin D by *Streptomyces parvulus*. W. KENNETH WILLIAMS AND EDWARD KATZ* 281

Relationship Between the Physicochemical Nature of Human Interferon, the Cell Induced, and the Inducing Agent. THOMAS C. CESARIO,* PATRICIA J. SCHRYER, AND JEREMIAH G. TILLES 291

Lethal and Mutagenic Effects of 5-Iodouracil on Bacteriophage T4*td*8*r*II. DANIEL M. BYRD* AND WILLIAM H. PRUSOFF 312

Tetracycline Inhibits Propagation of Deoxyribonucleic Acid Replication and Alters Membrane Properties. MARTIN L. PATO 318

Transfer of a Plasmid-Specified Beta-Lactamase Gene from *Haemophilus influenzae*. J. R. SAUNDERS* AND R. B. SYKES 339

Comparison of Colicins B-K260 and D-CA23: Purification and Characterization of the Colicins and Examination of Colicin Immunity in the Producing Strains. ANTHONY P. PUGSLEY* AND PETER REEVES 345

Physiological Effects and Microbial Susceptibility

Drug Resistance and R Factors in *Salmonella typhi* Isolated in Korea. DOKI CHUN,* SUNG YONG SEOL, DONG TAEK CHO, AND RYONBIN TAK 209

Microdilution Transfer Plate Technique for Determining In Vitro Synergy of Antimicrobial Agents. PAULA F. DOUGHERTY, DAVID W. YOTTER, AND THOMAS R. MATTHEWS* 225

Effects of Purines and Pyrimidines on the Fungistatic Activity of 5-Fluorocytosine in *Aspergillus* Species. GERALD E. WAGNER AND SMITH SHADOMY* 229

In Vitro Activity of Ticarcillin Against Anaerobic Bacteria Compared with That of Carbenicillin and Penicillin. IRA ROY, VINH BACH, AND HARAGOPAL THADEPALLI* 258

Simple, Direct Broth-Disk Method for Antibiotic Susceptibility Testing of *Ureaplasma urealyticum*. MONIEK S. SPAEPEN AND RUTH B. KUNDSIN* 267

Evaluation of the Performance Parameters of a Prediluted, Quantitative Susceptibility Test Device. RICHARD C. TILTON* AND HENRY D. ISENBERG 271

Amphotericin B Susceptibility Testing of Yeasts with a Bactec Radiometric System. ROY L. HOPFER* AND DIETER GROSCHEL. 277

Hemagglutination Inhibition Assay for Gentamicin. W. A. MAHON,* RHODA I. FELDMAN, AND GEORGE H. SCHERR 359

In Vitro Activity of Netilmicin. J. A. SMITH, J.R. MORGAN,* AND M. MOGYOROS 362

Bioassay for Miconazole. ANA ESPINEL-INGROFF, S. SHADOMY,* AND JOHN F. FISHER 365

Pharmacology and Therapeutics

Emergence of Gentmicin-Resistant *Klebsiella* in a General Hospital. R. P. RENNIE* AND I. B. R. DUNCAN 179

Pharmacological and Clinical Study of Bacampicillin in Acute Peritonsillitis—a Comparison with Ampicillin. HANS O. HALLANDER,* ANDERS FLODSTRÖM, AND JAN SJÖVALL 185

Antiviral Activities of Acyl Derivatives of 2,2′-Anhydro-1-β-D-arabinofuranosylcytosine and 1-β-D-arabinofuranosylcytosine in Cell Culture. KOSABURA SATO,* AKIO NOMURA, AND JOHN G. MOFFATT 191

Comparative Study of the Antiviral Activity of Acyl Derivatives of 2,2′-Anhydro-1-D-arabinofuranosylcytosine and Other Nucleosides Against Encephalitis in Mice. SHINYA NISHIYAMA, KOSABURO SATO,* TOSHIHIKO YAMANAKA, AND JOHN G. MOFFATT 198

Pharmacokinetics of Amikacin During Hemodialysis and Peritoneal Dialysis. LISBETH REGEUR, HANNE COLDING,* HERLUF JENSEN, AND JENS P. KAMPMANN 214

Antimicrobial Prophylaxis for Catheter-Associated Bacteriuria. MICHAEL R. BRITT,* RICHARD A. GARIBALDI, WILLIAM A. MILLER, RICHARD M. HEBERSTON, AND JOHN P. BURKE 240

Bone Marrow Toxicity Associated with 5-Fluorocytosine Therapy. CAROL A. KAUFMAN* AND PETER T. FRAME 244

Pharmacokinetics of Cefamandole in Patients with Renal Failure. BURT R. MEYERS AND SHALOM Z. HIRSCHMAN* 248

Pharmacokinetics of Cefamandole in Patients with Normal and Impaired Renal Function. HANS-EBERHARD MELLIN, PETER G. WELLING, AND PAUL O. MADSEN* 262

Combined Antiviral Effects of Interferon, Adenine Arabinoside, Hypoxanthine Arabinoside, and Adenine Arabinoside-5′-Monophosphate in Human Fibroblast Cultures. YVONNE J. BRYSON AND L. H. KRONENBERG* 299

Experimental Herpes Simplex Virus Type 1 Encephalitis: Treatment with 5-Trifluoromethyl-2′-Deoxyuridine. D. W. CLOUGH* AND J. RODNEY PARKHURST 307

Cefadroxil, a New Broad-Spectrum Cephalosporin. R. E. BUCK* AND K. E. PRICE 324

Comparative Human Oral Clinical Pharmacology of Cefadroxil, Cephalexin, and Cephradine. MORRIS PFEFFER,* ANDRE JACKSON, JOSE XIMENES, AND HAIRO PERCHE DE MENEZES 331

Antimicrobial Activity of Cefamandole Against *Salmonella typhi*. SHALOM Z. HIRSCHMAN,* BURT R. MEYERS, AND ALBERT MILLER 369

Errata

Laboratory Evaluation of BL-S786, a Cephalosporin with Broad-Spectrum Antibacterial Activity. F. LEITNER,* M. MISIEK, T. A. PURSIANO, R. E. BUCK, D. R. CHISHOLM, R. D. DEREGIS, Y. H. TSAI, AND K. E. Price 372

Effect of Long-Term Therapies with Penicillin and Sulfadiazine on *Streptococcus mutans* and Lactobacilli in Dental Plaque. H. G. WELD AND H. J. SANDHAM* 372

R Plasmids in *Streptococcus agalactiae* (Group B). THEA HORODNICEANU,* D. H. BOUANCHAUD, G. BIETH, AND Y. A. CHABBERT 372

Anitmicrobial Susceptibility Testing of Yeasts: a Turbidimetric Technique Independent of Inoculum Size. JOHN N. GALGIANI* AND DAVID A. STEVENS 372

Volume 11 **Contents for March** Number 3

Biosynthesis; Chemistry; Mechanisms of Action and Resistance

Cairomycin B, a New Antibiotic. IBRAHIM R. SHIMI,* NADIA ABEDALLAH, AND SHADIA FATHY 313

Plasmid-Mediated Chloramphenicol Resistance in *Haemophilus influenzae*. V. VAN KLINGEREN,* J. D. A. VAN EMBDEN, AND M. DESSENS-KROON 383

Effect of Penicillin on Streptomycin Production by *Streptomyces griseus*. G. BARABAS* AND G. SZABO 392

Gardimycin, a New Antibiotic Inhibiting Peptidoglycan Synthesis. SERGIO SOMMA, WILMA MERATI, AND FRANCESCO PARENTI 396

Antibiotic Metabolites from a Murine Pseudomonad. STEPHEN J. WRATTEN, MARGARET S. WOLFE, RAYMOND J. ANDERSON, AND D. JOHN FAULKNER* ... 411

Chemically Defined Antimicrobial Susceptibility Test Medium for *Pseudomonas aeruginosa*. J. H. JORGENSEN,* J. C. LEE, AND P. M. JONES 415

Resistance Plasmid Transfer by *Seratia marcescens* in Urine. DENNIS R. SCHABERG,* ANITA K. HIGHSMITH, AND INA K. WACHSMUTH 449

Comparison of the Actions of 5-Fluorouracil and Ftorafur (NSC 148958) in *Escherichia coli*. PRISCILLA P. SAUNDERS* AND LIAN-YU CHAO 451

Terminal Stages in the Biosynthesis of Tylosin. E. T. SENO,* R. L. PIEPER, AND F. M. HUBER 455

Effects of 2-Deoxy-D-Glucose and 3-Deazauridine Individually and in Combination on the Replication of Japanese B Encephalitis Virus. DANIEL R. WOODMAN* AND JIMMY C. WILLIAMS 475

Inhibition of Initiation, Elongation, and Termination of Eukaryotic Protein Synthesis by Trichothecene Fungal Toxins. ERIC CUNDIFFE AND JULIAN E. Davies* 491

Cytochemical and Biochemical Studies of Yeasts After In Vitro Exposure to Miconazole. SONJA DE NOLLIN,* H. VAN BELLE, F. GOOSSENS, F. THONÉ, AND M. BORGERS 500

Mobilization of Morganocin 174 Plasmid and Kinetics of Morganocin Production in *Proteus* and *Escherichia coli* Hosts. J. A. WILLIAMS 514

Inhibition of Cellular and Viral Protein Synthesis by 3-Methyleneoxindole. SERGIO L. ABREU AND JEAN LUCAS-LENARD* 521

Plasmid-Mediated Beta-Lactamase Production in *Neisseria gonorrhoeae*. LYNN P. ELWELL,* MARILYN ROBERTS, LEONARD W. MAYER, AND STANLEY FALKOW 528

Effect of Ethambutol on the Viable Cell Count in *Mycobacterium smegmatis*. JAMES O. KILBURN* AND JOSEPH GREENBERG 534

Comparison of the Effects of Mecillinam and 6-Aminopenicillanic Acid on *Proteus mirabilis*, *Escherichia coli*, and *Staphylococcus aureus*. VICTOR LORIAN* AND BARBARA ATKINSON 541

Characterization of an R-Plasmid Associated with Ampicillin Resistance in *Shigella dysenteriae* Type 1. JORGE H. CROSA,* JORGE OLARTE, LEONARDO J. MATA, LINDA K. LULTROP, AND MARIA E. PENARANDA 553

Ampicillin-Induced Morphological Alterations of *Haemophilus influenzae* Type B. G. H. LUGINBUHL* AND RICHARD D. KLEIN 559

Action of the *N*-Trifluroacetyl Analogue of D-Chloramphenicol. K. B. FREEMAN 563

Microbial Formation of 4-Thiouracil. L. DOLAK,* W. T. SOKOLSKI, S. MIZAK, D. W. STROMAN, AND O. K. SEBEK 569

Stimulation of Interferon Production in Mice and Spleen Leukocytes by Analogues of BL-20803. PAUL SIMINIOFF* AND R. R. CRENSHAW 571

Physiological Effects and Microbial Susceptibility

Bacteriostatic and Bactericidal Activities of Selected Beta-Lactam Antibiotics Studied on Agar Plates. GOHTA MASUDA,* SUSUMU TOMIOKA, HIROSHI UCHICA, AND MITSUTO HASEGAWA 376

Antibacterial Activity of Netilmicin, a New Aminoglycoside Antibiotic, Compared with That of Centamicin. IAN PHILLIPS,* ANNE SMITH, AND KEVIN SHANNON 402

Pirbenicillin: Comparison with Carbenicillin and BL-P1654, Alone and with Gentamicin, Against *Pseudomonas aeruginosa*. CARLOS E. LOPEZ, HAROLD C. STANDIFORD,* BEVERLY A. TATEM, FRANK M. CALIA, STEPHEN C. SCHIMPFF, MERRILL J. SNYDER, AND RICHARD B. HORNICK 441

Comparison of In Vitro Activity of Cephalexin, Cephradine, and Cefaclor. NANCY J. BILL AND JOHN A. WASHINGTON II* 470

Antimicrobial Susceptibilities of *Yersinia enterocolitica* Biotype 4, Serotype O:3. M. I. MARKS,* S. SORGER, AND S. HAMMERBERG 566

Cerulenin-Inhibited Cells of *Staphylococcus aureus* Resume Growth When Supplemented with Either a Saturated or an Unsaturated Fatty Acid. ROBERT A. ALTENBERN 574

Pharmacology and Therapeutics

Changing Patterns of Plasmid-Mediated Drug Resistance During Tetracycline Therapy. J. K. MØLLER,* A. LETH BAK, A. STENDERUP, H. ZACHARIAE, AND H. AFZELIUS 388

In Vivo Effects of Josamycin, Erythromycin, and Placebo Therapy on Nasal Carriage of *Staphylococcus aureus*. SAMUEL Z. WILSON,* R. RUSSEL MARTIN, AND MARGARET PUTMAN 407

Comparative Trial of Carbenicillin and Ampicillin Therapy for Purulent Meningitis. G. D. OVERTURF,* E. A. STEINBERG, A. E. UNDERMAN, J. WILKINS, J. M. LEEDOM, A. W. MATHIES, JR., AND P. F. WEHRLE 420

Cefoxitin: Clinical Evaluation in 38 Patients. PETER N. R. HESELTINE,* DAVID F. BUSCH, RICHARD D. MEYER, AND SYDNEY M. FINEGOLD 427

Chemotherapy of an Experimental *Bacteroides fragilis* Infection in Mice. CLAY B. WALKER,* DORRIT NITZAN, AND TRACY D. WILKINS 435

Bioavailability of Tetracycline and Deoxycycline in Fasted and Nonfasted Subjects. PETER G. WELLING,* PATRICIA A. KOCH, CURTIS C. LAU, AND WILLIAM A. CRAIG 462

Comparative Growth Rates of Selected Anaerobic Species in Four Commonly Used Broth Media. WILLIAM SOTTILE II AND R. J. ZABRANSKY* 482

Volume 11 Contents for April Number 4

Biosynthesis; Chemistry; Mechanismns of Action and Resistance

R Plasmids from Asian Strains of *Vibrio cholerae*. R. W. HEDGES,* N. J. PEARSON, F. O'GRADY, AND J. L. VIALARD 585

Pseudomonas aeruginosa Strain Isolated in France That Carries a Plasmid Determining Carbenicillin Resistance. Y. MICHEL-BRIAND,* VILMA A. STANISICH, AND M. JOUVENOT 589

Penicillin Resistance and Penicillinase Production in Clinical Isolates of *Bacteroides melaninogenicus*. PATRICK R. MURRAY* AND JON E. ROSENBLATT ... 605

Influence of Antioxidants on the Bioactivity of Amphotericin B. FRED A. ANDREWS,* WILLIAM H. BEGGS, AND GEORGE A. SAROSI ... 615

Plasmid-Mediated Aminoglycoside Phosphotransferase of Broad Substrate Range That Phosphorylates Amikacin. PATRICE COURVALIN AND JULIAN DAVIES* 619

Growth Inhibition of *Escherichia coli* W by D-Norvalyl-D-Alanine: an Analogue of D-Alanine in Position 4 of the Peptide Subunit of Peptidoglycan. F. C. NEUHAUS,* S. GOYER, AND D. W. NEUHAUS ... 638

Macrolide Resistance in *Staphylococcus aureus*: Induction of Macrolide-Resistant Protein Synthesis. NORRIS E. ALLEN ... 661

Macrolide Resistance in *Staphylococcus aureus*: Inducers of Macrolide Resistance. NORRIS E. ALLEN ... 669

Bacteriocin Production by Strains of *Bacteroides* Isolated from Human Feces and the Role of These Strains in the Bacterial Ecology of the Colon. S. J. BOOTH,* J. K. JOHNSON, AND T. D. WILKINS ... 718

Cefoxitin Resistance to Beta-Lactamase: a Major Factor for Susceptibility of *Bacteroides fragilis* to the Antibiotic. GARY DARLAND* AND JEROME BIRNBAUM . 725

Bactericidal Factor Produced by *Haemophilus influenzae* b: Partial Purification of the Factor and Transfer of Its Genetic Determinant. RICHARD A. VENEZIA,* P. M. MATUSIAK, AND R. G. ROBERTSON ... 735

Effects of Ionenes on Interferon Induction by Poly(Inosinic Acid)·Poly(Cytidylic Acid). BOREK JANIK,* ERIK DE CLERCQ, AND RONALD G. SOMMER ... 756

Physiological Effects and Microbial Susceptibility

In Vitro Activity of Cinoxacin, Ampicillin, and Chloramphenicol Against *Shigella* and Nontyphoid *Salmonella*. ETHAN RUBINSTEIN* AND BRACHA SHAINBERG 577

Susceptibility of Anaerobic Bacteria to Metronidazole, Ornidazole, and Tinidazole and Routine Susceptibility Testing by Standardized Methods. JÜRG WÜST . 631

Susceptibility of Clinical Isolates of Cytomegalovirus to Human Interferon. BOSKO POSTIC* AND JOHN N. DOWLING ... 656

Measurement of Polyene Antibiotic-Mediated Erythrocyte Damage by Release of Hemoglobin and Radioactive Chromium. E. B. SIEGEL ... 675

Comparative Susceptibility of Anaerobic Bacteria to Ticarcillin, Cefoxitin, Metronidazole, and Related Antimicrobial Agents. DAVID K. HENDERSON, ANTHONY W. CHOW,* AND LUCIEN B. GUZE ... 679

Susceptibility of *Clostridium perfringens* Isolated from Human Infections to Twenty Antibiotics. JOSEPH D. SCHWARTZMAN,* L. BARTH RELLER, AND WEN-LAN L. WANG ... 695

Cefazaflur, a New Parenteral Cephalosporin: In Vitro Studies. GEORGE W. COUNTS,* DAVID GREGORY, DELORES ZELZNIK, AND MARVIN TURCK ... 708

Evaluation of the In Vitro Antifungal Activity of Allicin. YASUO YAMADA* AND KEIZŌ AZUMA ... 743

Evaluation of the Autobac 1 Susceptibility Testing System in a Clinical Diagnostic Laboratory. MIGUEL MOGYOROS, JOHN R. MORGAN, AND JOHN A. SMITH* . 750

Mutagenicity and Antibacterial Activity of Hydroxamic Acids. CHING YUNG WANG* AND LANFORD H. LEE ... 753

Mycobacterium chelonei Infection: Successful Treatment Based on a Radiometric Susceptibility Test. JULIO ARROYO AND GERALD MEDOFF* ... 763

^{125}I Radioimmunoassay of Netilmicin. PAUL STEVENS,* LOWELL S. YOUNG, AND WILLIAM L. HEWITT ... 768

Pharmacology and Therapeutics

Effects of Antibiotics on Chemotaxis of Human Leukocytes. ARNE FORSGREN* AND DAVID SCHMELING 580

Penetration of Cefazolin, Cephaloridine, and Cefamandole into Interstitial Fluid in Rabbits. CLAUDE CARBON, ALAIN CONTREPOIS, NILS BRION, AND SUZANNE LAMOTTE-BARRILLON* 594

Comparative Activity of Ampicillin and Cefuroxime Against Three Types of *Haemophilus influenzae*. R. B. SYKES,* A. GRIFFITHS, AND D. M. RYAN 599

Netilmicin and Gentamicin: Comparative Pharmacology in Humans. LOUISE J. RIFF* AND GAIL MORESCHI 609

Therapeutic Evaluation of Minocycline and Tetracyline for Mixed Anaerobic Infection in Mice. GALE B. HILL 625

Therapy of Antimicrobial-Resistant Typhoid Fever. THOMAS BUTLER,* NGUYEN NGOC LINH, AND KEITH ARNOLD 645

Assay of Gentamicin in Serum by High-Pressure Liquid Chromatography. JOHN P. ANHALT 651

Indirect Mouse Model for the Evaluation of Potential Antiviral Compounds: Results with Venezuelan Equine Encephalomyelitis. RALPH W. KUEHNE,* WALLACE L. PANNIER, AND EDWARD L. STEPHEN 683

Tobramycin: Maternal-Fetal Pharmacology. BETTY BERNARD,* SALVADOR J. GARCIA-CAZARES, CHARLES A. BALLARD, LAURI D. THRUPP, ALLEN W. MATHIES, AND PAUL F. WEHRLE 688

Levels of Carbenicillin, Ticarcillin, Cephalothin, Cefazolin, Cefamandole, Gentamicin, Tobramycin, and Amikacin in Human Serum and Interstitial Fluid. JAMES S. TAN* AND SARA JANE SALSTROM 698

Chemotherapy of Genital Herpes Simplex Virus Type 2 Infections of Female Hamsters. HAROLD E. RENIS 701

Side Effects of Minocycline: a Double-Blind Study. W. LEE FANNING, DIETER W. GUMP,* AND ROBERT A. SOFFERMAN 712

Distribution of Sodium Cefazolin in Serum, Muscle, Bone Marrow, and Bone of Normal Rabbits. D. J. PITKIN, C. SACHS, I. ZAJAC, AND P. ACTOR* 760

Efficacy of 5,6-Dihydro-5-Azathymidine Against Cutaneous Herpes Simplex Virus in Hairless Mice. GERALD E. UNDERWOOD AND SHELDON D. WEED* 765

Erratum

Preparation of Isolated Intestinal Villi Useful for Studying Hydrolysis Rates of Penicillin and Cephalosporin Esters. WALTER E. WRIGHT AND VERLE D. LINE 771

Volume 11

Contents for May

Number 5

Biosynthesis: Chemistry; Mechanisms of Action and Resistance

Permeability Barrier to Rifampin in Mycobacteria. J. HUI, N. GORDON, AND R. KAJIOKA* 773

Beta-Lactamases Produced by a *Pseudomonas aeruginosa* Strain Highly Resistant to Carbenicillin. ROGER LABIA,* MARLENE GUIONIE, JEAN-MICHEL MASSON, ALAIN PHILLIPPON, AND MICHEL BARTHELEMY 785

Amphotericin B and Filipin Effects on L and HeLa Cells: Dose Response. JANINA

KOTELR-BRAJTBURG, GERALD MEDOFF,* DAVID SCHLESSINGER, AND GEORGE S. KOBAYASHI 803

Clavulanic Acid, a Beta-Lactamase-Inhibiting Beta-Lactam from *Streptomyces clavuligerus*. C. READING AND M. COLE* 852

Aggregation-Dependent Changes in Susceptibility of *Dictyostelium discoideum*. EDWARD F. ROSSOMANDO,* MARY ANN HESLA, MARY ANN HEITZ, AND BARBARA MALDONADO 858

Inducible Resistance to D-Cycloserine in *Bacillus subtilis* 168. VIRGINIA L. CLARK AND FRANK E. YOUNG* 871

D-Cycloserine-Induced Alterations in the Transport of D-Alanine and Glycine in *Bacillus subtilis* 168. VIRGINIA L. CLARK AND FRANK E. YOUNG* 877

Energy Coupling Factor as Target of Colicin K: Characterization of a Colicin K-Insensitive *ecf* Mutant of *Escherichia coli*. JEN-SHIANG HONG,* LYNNE HAGGERTY, AND MICHAEL A. LIEBERMAN 881

Tolerant Response of *Streptococcus sanguis* to Beta-Lactams and Other Cell Wall Inhibitor. DIANE HORNE AND ALEXANDER TOMASZ* 888

Unusual Susceptibility of *Erwinia amylovora* to Antibacterial Agents in Relation to the Barrier Function of its Cell Envelope. ARUN K. CHATTERJEE, RICHARD F. BUSS, AND MORTIMER P. STARR* 897

Extreme Sensitivity of Staphylococcal Enterotoxin B and C Production to Inhibition by Cerulenin. ROBERT A. ALTENBERN 906

Phosphonoacetic Acid-Resistant Mutants of Herpes Simplex Virus: Effect of Phosphonoacetic Acid on Virus Replication and In Vitro Deoxyribonucleic Acid Synthesis in Isolated Nuclei. YECHIEL BECKER,* YAEL ASHER, YAFFA COHEN, EYNAT WEINBERG-ZAHLERING, AND JOSEPH SHLOMAI 919

Physiological Effects and Microbial Susceptibility

In Vitro Activity of Netilimicin Compared with Gentamicin, Tobramycin, Amikacin, and Kanamycin. THEODORE C. EICKHOFF* AND JOSEPHINE M. EHRET .. 791

Inhibition of Herpes Simplex Virus Strains Isolated from Herpetic Keratitis by Polyinosinic Acid-Polycytidylic Acid. OFIRE SMETANA, EMAULE EYLAN,* AND MIRIAM WEINBERG 797

Synergistic Action of Erythromycin and Cefamandole Against *Bacteroides fragilis* subsp. *fragilis*. R. S. GRIFFITH,* G. L. BRIER, AND J. D. WOLNY 813

Antimicrobial Susceptibility of *Haemophilus parainfluenzae*. JOAN B. MAYO AND LAURENCE R. MCCARTHY* 844

Rapid Microbiological Assay for Chlorhydroxyquinoline That Uses a Cryogenically Stored Inoculum. R. F. COSGROVE* 848

Azlocillin: In Vitro Studies of a New Semisynthetic Penicillin. DOROTHY STEWART AND GERALD P. BODEY* 865

Susceptibility of Anaerobic Bacteria to Cefoxitin and Related Compounds. VINH TOAN BACH, IRA ROY, AND HARAGOPAL THADEPALLI* 912

Gas Chromatographic Determination of 5-Fluorocytosine: a Modified Extraction Method. SIOK-HIU WEE AND JOHN P. ANHALT* 914

Semiautomated Turbidimetric Bioassay for the Ionophore A23187. JACK E. WESTHEAD* 916

Pharmacology and Therapeutics

Amoxicillin Therapy of Acute Urinary Infections in Adults. A. R. RONALD,* F. JAGDIS, G. HARDING, S. HOBAN, P. MUIR, AND M. GURWITH 780

Effect of Probenecid on the Blood Levels and Urinary Excretion of Cefamandole. R. S. GRIFFITH,* H. R. BLACK, G. L. BRIER, AND J. D. WOLNY 809

Antimicrobial Therapy of Experimental Group B Streptococcal Infection in Mice. A. DEVEIKIS,* V. SCHAUF, M. MIZEN, AND L. RIFF 817

Renal Pharmacology of Netilmicin. PETER J. S. CHIU,* GEORGE H. MILLER, ARTHUR D. BROWN, JAMES F. LONG, AND J. ALLAN WAITZ 821

Activities of Various 4-Aminoquinolines Against Infections with Chloroquine-Resistant Strains of *Plasmodium falciparum*. L. H. SCHMIDT,* DENNIS VAUGHN, DONNA MUELLER, RUTH CROSBY, AND REBECCA HAMILTON 826

Cephradine: Penetration into Cerebrospinal Fluid and Effects of Its Administration into the Cerebral Ventricles of Cats. SAMI I. HARIK,* KAMAL F. AKL, AND MARWAN UWADAH 909

Volume 11 Contents for June Number 6

Biosynthesis; Chemistry; Mechanisms of Action and Resistance

Drug Resistance in Group D Streptococci of Clinical and Nonclinical Origin: Prevalence, Transferability, and Plasmid Properties. J. D. A. VAN EMBDEN,* H. W. B. ENGEL, AND B. VAN KLINGEREN 925

Beta-Lactamase-Directed Barrier for Penicillins of *Escherichia coli* Carrying R Plasmids. TATSUO YAMAMOTO AND TAKESHI YOKOTA* 936

Inhibition of Influenza Virus Ribonucleic Acid Polymerase by Ribavirin Triphosphate. BERTIL ERIKSSON, ERIK HELGSTRAND, NILS GUNNAR JOHANSSON, ALF LARSSON, ALFONS MISIORNY, JAN OLOF NORÉN, LENNART PHILLIPSON, KJELL STENBERG, GÖRAN STENING, STIG STRIDH, AND BO OBERG* 946

Cyclic Adenylic Acid-Dependent and -Independent Production of Chloramphenicol Acetyltransferase in *Escherichia coli* Carrying R Plasmids. TAKESHI YOKOTA, RIE KUWAHARA, SUMIKO HAGIWARA, AND SHOGO KUWAHARA* 952

Inhibition of Amino Acid Transport in *Escherichia coli* by Some Beta-Lactam Antibiotics. SCOTT V. ANDERSON AND CLAIRE M. BERG* 968

Altered Surface Properties of *Escherichia coli* Associated with a Specific Amino Acid Change in the S12 Ribosomal Protein of Streptomycin-Resistant Mutants. SIDNEY PESTKA,* HARRY WALTER, AND LAWRENCE G. WAYNE 978

Evaluation of Three Newer Methods for Investigating Protein Interactions of Penicillin G. LANCE R. PETERSON,* DALE N. GERDING, HORACE H. ZINNEMAN, AND BARBARA A. MOORE 993

Mercury Resistance and R Plasmids in *Escherichia coli* Isolated from Clinical Lesions in Japan. HIDEOMI NAKAHARA, TOMOAKI ISHIKAWA, YASUNAGA SARAI, ISAMU KONDO, HIROYUKI KOZUKUE,* AND SUSUMU MITSUHASHI 999

Transfer of Beta-Lactamase Genes of *Neisseria gonorrhoeae* by Conjugation. LINDA A. KIRVEN* AND CLYDE THORNSBERRY 1004

Novel Actinomycins Formed by Biosynthetic Incorporation of *cis* and *trans*-4-Methylproline. E. KATZ,* W. K. WILLIAMS, K. T. MASON, AND A. B. MAUGER 1056

Induction of Bacteriocins from *Clostridium perfringens* by Treatment with Mitomycin C. D. E. MAHONY 1067

Production of an Antibiotic by an Organism from Human Feces. WALLACE J. IGLEWSKI 1084

Rapid Penicillinase Paper Strip Test for Detection of Beta-Lactamase-Producing *Haemophilus influenzae* and *Neisseria gonorrhoeae*. JAMES H. JORGENSEN,* JEAN C. LEE, AND GARY A. ALEXANDER 1087

Physiological Effects and Microbial Susceptibility

Bactericidal Activity of Macromomycin, an Antitumor Antibiotic. FRANCIS L. A. BUCKMIRE* AND JEFFREY L. WINKELHAKE 1010

In Vitro Studies of Netilimicin, a New Aminoglycoside Antibiotic. DOROTHY STEWART, GERALD P. BODEY,* AND BARBARA LEBLANC 1017

Manner and Meaning of Susceptibility Testing of Ampicillin-Resistant *Haemophilus influenzae*. BARRY M. GRAY, CAROL A. HUBBELL, AND HUGH C. DILLION, JR.* 1021

Five-Hour Minimal Inhibitory Concentration Test of Four Antimicrobial Agents for *Pseudomonas aeruginosa*. W. J. BROWN* AND R. L. SAUTTER 1064

In Vitro Antibiotic Susceptibility of Salmonellae. FACELUCIA BARROS, OKSANA M. KORZENIOWSKI, MERLE A. SANDE,* KATIA MARTINS, LUIZ CARLOS SANTOS, AND HEONIR ROCHA 1071

Double-Osmotic-Shock Procedure to Prepare Gentamicin Adenine Mononucleotide Transferase for the Enzymatic Assay of Gentamicin. J. DANKERT* AND J. WOLTJES 1074

Effect of Anaerobiosis on Antimicrobial Susceptibility of Staphylococci. LIZZIE J. HARRELL AND JAMES B. EVANS* 1077

Incidence and Elimination of R Plasmids in *Vibrio cholerae*. SUJATA G. DASTIDAR, ROMA PODDAR, RANAJIT KUMAR, AND A. N. CHAKRABARTY* 1079

Pharmacology and Therapeutics

Penetration of Cefamandole into Spinal Fluid. EVAN A. STEINBERG,* GARY D. OVERTURF, LARRY J. BARAFF, AND JEANETTE WILKINS 933

Mechanism of Accumulation of the Protein Antibiotic Neocarzinostatin in Bladder Tissue: Intravenous Administration, Urinary Excretion, and Absorption into Bladder Tissue. HIROSHI MAEDA,* SADAAKI SAKAMOTO, AND JIRO OGATA 941

Synergy Between Ticarcillin and Tobramycin Against *Pseudomonas aeruginosa* and *Enterobacteriaceae* In Vitro and In Vivo. K. R. COMBER, M. J. BASKER, CHRISTINE D. OSBORNE, AND R. SUTHERLAND* 956

Nafcillin Entry into Human Cerebrospinal Fluid. BYRON E. FOSSIECK, JR.,* JAMES G. KANE, CARLOS R. DIAZ, AND RICHARD H. PARKER 965

Distribution of Gentamicin and Amikacin in Rabbit Tissue. MARGARET L. KORNGUTH* AND CALVIN M. KUNIN 974

Comparative Interferon-Inducing and Antiviral Properties of 2-Amino-5-Bromo-6-Methyl-4-Pyrimidinol (U-25,166), Tilorone Hydrochloride, and Polyinosinic-Polycytidylic Acid. DALE A. STRINGFELLOW 984

Absorption of Orally Administered Nafcillin in Normal Healthy Volunteers. CHATRCHAI WATANAKUNAKORN 1007

Effects of Gestational Age, Birth Weight, and Hypoxemia on Pharmacokinetics of Amikacin in Serum of Infants. MARTIN G. MYERS,* ROBERT J. ROBERTS, AND NAJWA J. MIRHIJ 1027

Penetration of Cefazolin into Pleural Fluid. DONALD R. COLE* AND JUANITO PUNG 1033

In Vitro Synergism Between Carbenicillin and Aminoglycosidic Aminocyclitols Against *Acinetobacter calcoaceticus* var. *anitratus*. RICHARD H. GLEW,* ROBERT C. MOELLERING, JR., AND KAREN R. BUETTNER 1036

Exudate Levels and Bactericidal Activity of Cefazolin in a New Local Infection System Using Rat Granuloma Pouches. MINORU NISHIDA* and TAKEO MURAKAWA 1042

Uniform Susceptibility of Various Strains of *Coccidioides immitis* to Amphotericin B. M. S. COLLINS AND D. PAPPAGIANIS* 1049

Response of Influenza Virus-Infected Mice to Selected Doses of Ribavirin Administered Intraperitoneally or by Aerosol. R. F. BERENDT,* J. S. WALKER, J. W. DOMINIK, AND E. L. STEPHEN 1069

Distribution of Amikacin in Serum, Muscle, and Fat in Children After a Single Intramuscular Injection. F. DASCHNER,* E. REISS, AND JÜRGEN ENGERT .. 1081

Erratum

Microassay for Amphotericin B. ROBERT M. BANNATYNE, ROSE CHUENG, AND HANNA R. DEVLIN 1089

AUTHOR INDEX

VOLUME 12

Abrutyn, Elias, 484
Actor, Paul, 284
Adams, M. A., 559
Alexander, Sheila, 51
Allard-Leprohon, Diane, 201
Allen, D. A., 545
Allen, G. P., 243
Allen, James C., 710
Allen, Linda, 51
Allen, Lois B., 114, 120
Alpert, Susan, 31, 630
Anderson, J. D., 559
Arai, Tadashi, 255
Arensman, J. B., 40
Armstrong, Donald, 614
Ashikaga, Taka, 642
Aswell, J. F., 243
Austin, B., 545
Azuma, Akiko, 537

Baaske, D. M., 298
Bailey, J. V., 335
Ballard, Charles A., 231
Banerjee, P. C., 124
Bannatyne, Robert M., 449, 550
Baron, Ellen S., 270
Barry, A. L., 47
Barsoum, Ibrahim S., 748
Baumueller, Axel, 237, 240, 328
Beam, Thomas R., Jr., 710
Bender, Gary R., 339
Bennett, P. M., 219
Bergeron, Michel G., 682
Bernard, Betty, 231
Best, Gary K., 513
Betts, Robert F., 498
Bianchi, A., 429
Billiau, A., 11
Blackman, H. Jane, 673
Bloch, Richard, 730
Bodey, Gerald P., 717
Boon, R. J., 736
Bowman, Ralph L., 474
Bracis, R., 438
Bramucci, M. G., 435
Braverman, Shirley, 281
Broddle, W. D., 465
Bryan, L. E., 163
Bryant, R. E., 93

Cacciatore, Robert, 295
Calderwood, Susan Adams, 401
Campbell, D. E., 243
Capmau, M. L., 26
Carrizosa, Jaime, 479
Carver, Melinda, 609
Carter, Mary Jo, 513
Carter, William, A., 4
Catlin, B. Wesley, 147
Chadwick, Paul, 301
Chaslus-Dancla, Elisabeth T., 697
Cheung, Rose, 449, 550
Chila, Mara, 444
Childress, Jack R., 703
Chiou, Win L., 707
Christensen, E. F., 178
Chunn, C. John, 226
Colvin, J. H., 61
Colwell, R. R., 373, 545
Comber, K. R., 736
Condon, R. G., 335
Cook, P. Dan, 114
Coppens-Kahan, L., 503
Counts, George W., 591

Damme, J. Van, 11
Danbara, Hirofumi, 131
Daneau, D., 503, 563
Daneo-Moore, Lolita, 281
Davis, William B., 213, 529
Dawson, Chandler R., 673
De Carneri, I., 429
Dee, Thomas H., 548
DeLeys, Robert J., 578
Desmyter, J., 11
De Somer, P., 11
Devaud-Felix, Marlyse, 201
Devínsky, Ferdinand, 139
Diaz, Carlos R., 98
Dominik, J. W., 40
Donner, Alan, 630
Douglas, R. Gordon, Jr., 498
Due, S. L., 73
Duval, E. J., 435
Duval, J., 26
Dyckman, John D., 703
Dymicky, M., 353

Edwards, Carol C., 451
Edy, V. G., 11
Evans, James B., 534

Fass, Robert J., 102, 551
Ferguson, Rod A., 655
Fields, B. T., 655
Filan, John J., 284
Fink, Theodore J., 642
Fingal, Christina M., 120
Finland, Maxwell, 31, 649
Fisher, Bruce D., 614
Fontana, Roberta, 745
Fortner, Clarence L., 618
Franker, Colin K., 410
Freese, Ernst, 357
Friedman-Kien, Alvin E., 577
Fuchs, Peter C., 47
Fukuoka, Y., 455

Gallagher, Molly, 484
Garcia-Cazares, Salvador, 231
Gauvreau, Léo, 682
Gavan, Thomas L., 47
Geerts, W., 314
Genther, C. S., 84
Gentry, G. A., 243
George, Harvey, 630
Georgiades, J. A., 11
Gerding, Dale N., 606
Gerdts, Alice M., 37
Gerlach, E. Hugh, 47
Gerpheide, S. A., 571
Gilbert, D. N., 438
Gilbert, David N., 226
Glicksman, Caroline, 349
Glotzbecker, Cheryl, 346
Guillot, J. F., 697
Gump, Dieter W., 642
Goldberg, I., 308
Goldmann, Donald A., 288
Goodhart, Glenn L., 540
Grant, Robert B., 431
Grayston, J. Thomas, 80
Greenwood, David, 678
Gröschel, Dieter, 733

Hahn, Davis M., 618
Hall, Wendell H., 606
Hall, William C., 660
Hańka, Ladislav J., 571
Hariri, A., 390
Hartstein, A. I., 93
Harrel, Lizzie J., 534
Hartwig, Eldert C., 295
Hashimoto, Yoshinobu, 537
Hauser, K. J., 440
Hays, P. R., 185
Hayashi, T., 455
Heinstein, Peter, 298
Herbert, C. Achille, 410
Heremans, Hubertine, 11
Higuchi, Tomihiko, 518
Hilmas, D. E., 40
Hinks, Eileen T., 281
Hirschman, Shalom Z., 122
Hoeprich, P. D., 582
Hopfer, Roy L., 733
Horoszewicz, Julius S., 4
Hoyme, Udo, 237, 240
Hsu, Chen H., 192
Huber, Thomas W., 703
Huffman, John H., 114
Huhtanen, C. N., 353
Husson, M., 563
Husson, Mireille, 135

Inoue, Kunio, 418

Inoue, Matsuhisa, 418
Isenberg, Henry D., 470
Iwata, Kazuo, 206
Iyobe, Shizuko, 1

Jackson, Carl W., 451
Jackson, George G., 707
Jagdis, F. A., 582
Jamieson, A. T., 243
Jobanputra, Vinay, 406
Jones, Ronald N., 47
Jones, S. R., 93
Juni, Elliot, 573

Kaloyanides, George J., 474
Kamay, B., 107
Kamay, B. A., 721
Kane, James G., 98
Kaneko, Yoshinori, 427
Kass, Edward H., 630
Kau, D. L. K., 73
Kawata, Tomio, 255
Kaye, Donald, 479
Kayser, F. H., 261
Kempin, Sanford J., 451
Klastersky, J., 503, 563
Klastersky, Jean, 135
Klein, Jerome O., 649
Klein, Richard J., 577
Kodgis, Lorraine F., 630
Kopecko, Dennis J., 270
Korzeniowski, Oksana M., 157, 290
Kozak, Alan J., 606
Kozin, Franklin, 548
Krizsanovich-Williams, K., 395
Krogstad, Donald J., 401
Kuhn, Jonathan, 322
Kunz, Lawrence J., 401
Kuo, Cho-chou, 80
Kurtz, Theodore W., 192

Lafont, J. P., 697
Larsh, H. W., 390
Lau, Curtis C., 328
Lawrence, R. M., 582
Lee, B. K., 335
Le Goffic, F., 26
Leong, Susan S., 4
Lesher, Robert J., 339
Letarte, Robert, 201
Levison, Matthew E., 442
Lin, Melody Y. C., 742
Lincoln, Lawrence J., 484
London, William T., 510
Loper, J. C., 84
Lovett, P. S., 435
Lowe, Ernest W., 630
Luft, Friedrich C., 730

Madissoo, H., 178
Madsen, P. O., 237, 240
Madsen, Paul O., 328
Magnussen, C. Richard, 498
Maier, Thomas W., 444
Marder, H. P., 261
Marquez, J. A., 335
Marquis, Robert E., 339
Martel, A., 26
Masuda, Kuniyoshi, 255
McCloskey, Richard V., 636
McCormack, William, 31
McCormack, William M., 630
McHugh, Gail L., 423
Meagher, Mary Pat, 498
Medeiros, Antone A., 461
Meunier-Carpentier, F., 503
Meyers, Burt R., 122
Meyer, Rich B., Jr., 114
Mikami, Yuzuru, 255
Miller, M. J., 93
Miller, W. M., 73
Minshew, Barbara H., 597, 688
Mitsuhashi, S., 455
Mitsuhashi, Susumu, 418, 427
Moellering, Robert C., Jr., 401
Monti, G., 429
Moreau, N., 26
Moxon, E. Richard, 461
Murai, Teiko, 427
Musher, Daniel M., 625

Nakae, Masataka, 427
Nakamura, Toru, 518
Neal, W. D., 185
Nguyen, Bach M., 682
Nolan, C. M., 655

O'Brien, Thomas F., 461
O'Grady, Francis, 678
Ohmori, Hitoshi, 537
Ostenson, R. C., 655
Owen, N. V., 465

Pace, Paul J., 147
Palmer, Amos E., 510
Parker, Richard H., 98
Parks, L. W., 185
Parsley, Thomas L., 349
Patrick, K. E., 93
Pechere, Jean-Claude, 201
Pelsor, Frank, 98
Pelton, Stephen I., 649
Peng, Geoffrey W., 707
Perkins, Robert L., 102
Peterson, Lance R., 606
Petrocheilou, V., 126, 219
Phillips, David M., 529
Pinney, R. J., 555
Pitkin, Donald, 284
Pollock, Helen M., 688
Powanda, Michael C., 602
Preston, David, 67
Prevost, J. M., 503
Prior, Richard B., 102, 551
Provonchee, Richard B., 349
Prozesky, O. W., 543
Pšenák, Mikuláš, 139

Quay, J. F., 73

Radin, Alan M., 642
Rasco, Jane, 51
Reiffenstein, J. C., 178
Richmond, M. H., 126, 219
Robins, Roland K., 114
Romanzi, C. A., 745
Rosenblatt, Jon E., 37
Rosenthal, Ken S., 665
Rosner, Bernard, 31
Rosselet, Armel, 368
Roth, Frieda K., 498

Sackel, Stephen G., 31
Saikawa, I., 455
Salmon, Sheila, 301
Sammons, Myrl L., 602
Sande, Merle A., 157, 290
Sanders, Christine C., 195, 293, 490
Sanders, C. V., 438
Sanders, W. Eugene, Jr., 293, 295
Sands, Jeffrey A., 523
Sanner, Gail D., 703
Santoro, Jerome, 442
Satta, G., 745
Saz, Arthur K., 270
Schachter, Julius, 673
Schaffner, C. P., 582
Scheld, W. Michael, 157, 290
Scheer, E. R., 107
Schimpff, Stephen C., 618
Schmidt, L. H., 51
Schneider, Nathan J., 295
Schoenknecht, Fritz D., 597, 688
Schoeny, R. S., 84
Schoub, Barry D., 543
Scott, George H., 660
Semple, Anne Markley, 288
Sever, John L., 510
Shadomy, Smith, 609
Sheagren, John N., 742
Sherris, J. C., 61
Sherris, John C., 688
Shimizu, Shoji, 1
Shurin, Paul A., 649
Sidwell, Robert W., 114
Siegel, David, 122
Silver, Michael S., 591
Silverblatt, Fredrick J., 474
Sinha, R. P., 383
Sizemore, Ronald K., 373
Slee, A. M., 107, 721
Sloan, Rebecca S., 730
Smith, C. C., 84
Smith, L., 559
Sneller, Mark R., 390
Sorenson, W. G., 390
Soussy, C. J., 26
Spratt, Brian, G., 406
Standiford, Harold C., 618
Starr, P. R., 226
Stephen, Edward L., 602
Stevens, Paul, 286
Stewart, Dorothy, 717

Storm, Dan R., 665
Šubík, Július, 139
Sullivan, H. R., 73
Sutherland, R., 736
Suzuki, Yoji, 537
Swanzy, Susan R., 597
Swartz, Morton, N., 423
Sykes, R. B., 126
Syriopoulou, Georgia Ph., 288
Szwed, James J., 730

Tai, M., 455
Takácsová, Gizela, 139
Taki, H., 455
Tanzer, J. M., 107, 721
Taylor, Beverly, 301
Taylor, Diane E., 431
Taylor, R., 435
Thielen, Paul, 231
Thornsberry, Clyde, 47
Tilton, C. Richard, 470
Tribe, M. J., 555
Trottier, Sylvie, 682
Turck, Marvin, 591
Turnipseed, S. A., 465
Turner, J. R., 67

Uchino, Haruto, 518
Ueda, Stuart, 410
Ueo, K., 455
Ulitzur, S., 308

Vainrub, Bernardo, 625
Valdez, Henry, 295
Van Den Elzen, H. M., 163
Vogels, G. D., 314

Wagman, G. H., 335
Wagner, Gerald, 609
Wakisaka, Gyoichi, 518
Wang, San-pin, 80
Warner, Patricia, 444
Wasserman, A. E., 353
Watanabe, Y., 455
Watanakunakorn, Chatrchai, 346
Weber, Morton M., 213
Webster, H. M., 559
Weerkamp, A., 314
Weerts-Ruhl, D., 563
Weinstein, Allan J., 484
Weinstein, M. J., 335
Weisbach, Jerry A., 284
Weissfeld, Alice Schauer, 703

Weller, John M., 192
Welling, Peter G., 328
Wennersten, Christine, 401
White, John D., 660
White, Roderick, 284
Wiernik, Peter H., 618
Williams, J. A., 395
Williams, Robert P., 703
Wohlhieter, John A., 270
Wold, J. S., 67, 465
Wood, David O., 513
Wormser, Gary, 122

Yamaguchi, Hideyo, 16, 206
Yap, Boh-Seng, 717
Yasuda, T., 455
Yokoyama, Koji, 255
Yoneda, Chieko, 673
Yoshikawa, Masanosuke, 131
Young, Lowell S., 286
Young, Viola Mae, 618

Zabransky, R. J., 440
Zeleznik, Dolores, 591
Zimmermann, Willy, 368, 406
Zinner, Stephen H., 349
Zubrzycki, Leonard, 444

SUBJECT INDEX

VOLUME 12

Acriflavine-resistant mutant
  S. cremoris, 383
Actinomyces odontolyticus
  bacteriocin with temperature-dependent killing properties, 410
Adenine arabinoside
  latent herpes simplex virus infections, 577
Adenine arabinoside monophosphate
  latent herpes simplex virus infections, 577
Aerobic susceptibility to antibiotics
  agar shake tube technique, 534
Agar dilution susceptibility
  correlated with netilmicin disk diffusion susceptibility, 288
Agar shake tube technique
  determining aerobic and anaerobic susceptibility to antibiotics, 534
A2 influenza-infected mice
  effects of rimantadine and ribavirin on arterial blood pH and gas tensions and lung water content, 40
Amikacin
  ototoxicity as compared with gentamicin in cats, 178
  resistant bacteria in burn center, 688
  synergy with trimethoprim against gram-negative bacilli, 349
Amikacin and cephalothin
  granulocytopenic cancer patients, 618
Amine oxides
  antimicrobial activity, 139
  structure-activity correlation, 139
Aminoglycoside antibiotics
  enzymatic assay, 597
Aminoglycosides
  chemotactic response of human polymorphonuclear leukocytes, 540
  elimination from serum to permit bioassay of other antimicrobial agents, 286
Aminoglycosidic aminocyclitol antibiotics
  resistance among enterococci, 401
  synergism with penicillin, 401
Amoxycillin
  compared with ampicillin on *E. coli* morphology, 736
Amphotericin B
  against *C. neoformans*, 390
  compared with amphotericin B methyl ester in *Macaca mulatta*, 582
  neutrophil toxicity, 226
  radiometric determination in body fluids, 733
  susceptibility of *C. albicans*, 449
Amphotericin B assays
  fresh versus frozen results, 550
Amphotericin B methyl ester
  compared with amphotericin B in *Macaca mulatta*, 582
  susceptibility of *C. albicans*, 449
Ampicillin
  blood, brain, and cerebrospinal fluid concentrations in rabbits, 710
  compared with amoxycillin on *E. coli* morphology, 736
  H. influenzae B bacteremia and meningitis, 461
Anaerobic susceptibility to antibiotics
  agar shake tube technique, 534
Anaerobic wound infections in cancer patients
  comparative trial of clindamycin, tinidazole, and doxycycline, 563
Ansaycin antibiotics
  murine leukemia virus, 4
  spleen focus-forming virus, 4
Antibiotic concentrations
  streptococcal endocarditis, 479
Antibiotic-resistant marine bacteria
  plasmids carried by, 373
Antibiotics
  in Wilkins-Chalgren anaerobic susceptibility testing medium, 440
  prolonged storage, 440
Antibiotic susceptibility test device
  in-use evaluation, 470
Anti-*candida* activity
  of clotrimazole in combination with dioctyl sulfosuccinate, 206
Antilipogenic compounds
  determination by sensitive, rapid, and specific bioassay, 308
Antimetabolite activity
  detection, 322
  tryptophan analogs in *E. coli*, 322
Antimycotic azasterol
  physiological effects on *S. cerevisiae* cultures, 185
Antiplaque agents
  iodine-containing compounds, 107
Antistaphylococcal activity
  of nafcillin and oxacillin by sisomicin and netilmicin, 346
Antituberculous agents
  organisms in *M. fortuitum* complex, 295
Antiviral agents
  3-Deazaguanine, 3-deazaguanosine, and 3-deazaguanylic acid, 114
Arabinosylthymine
  antiviral activity in herpesviral replication, 243
  in vivo and in vitro mechanism of action, 243
Autolysin activation
  E. coli and *K. pneumoniae* envelopes, 745
Auxotypes
  N. gonorrhoeae, 147

Bacillus pumilus
  host function specified by plasmid pPL7065, 435
Bacillus subtilis
  effects of hexachlorophene and decanoate, 357
Bacterial prostatitis

treated by rosamicin, 240
Bacteriocin
from *A. odontolyticus*, 410
temperature-dependent killing properties, 410
Bacteriolytic action
of fluoride ions, 339
Bacteroides fragilis
bactericidal activity of gentamycin and clindamycin or gentamicin and chloramphenicol, 135
Beta-lactam antibiotic resistance
in *P. aeruginosa*, 537
Beta-lactamase
effect on ampicillin treatment, 461
plasmid-borne, transfer of in *N. gonorrhoeae*, 270
Biguanide agents
structural requirements for antiplaque activity, 721
Bisbiguanide agents
structural requirements for antiplaque activity, 721
Broth dilution susceptibility tests
electrical impedance measurements, 61

Candida albicans
antagonistic action of lipid components on clotrimazole on clotrimazole and miconazole, 16
morphological changes as a result of 5-fluorocytosine, 255
susceptibility to amphotericin B, 449
susceptibility to amphotericin B methyl ester, 449
Cefaclor
antibacterial activity, 591
compared with cephalexin, cephaloglycin, and cephradine, 609
comparison with cephalexin, 157
in vitro activity, 442
in vitro studies, 490
in vitro susceptibility studies, 290
oral cephalosporin, 490
orally administered antibiotic, 442
pharmacokinetics, 730
Cefaclor and cefatrizine
against aerobic pathogenic bacteria, 609
Cefadroxil
pharmacological and antimicrobial properties, 93
[^{14}C]Cefamandole
metabolic fate in rats and dogs, 73
Cefamandole
antibacterial activity, 67
blood, brain, and cerebrospinal fluid concentrations in rabbits, 710
penetration into fibrin clots, 688
Cefamandole nafate
antibacterial activity, 67
effect on tobramycin toxicity, 465
Cefatrizine
compared with cephalexin, cephaloglycin, and cephradine, 609
maternal-fetal pharmacology in the first 20 weeks of pregnancy, 231
Cefoxitin
cephamycin antibiotic, 636
Cefuroxime
susceptibility comparison with cephalothin, 47
Cell line MG-63
human interferon, 11
Cell wall antibiotics
temperature effects on minimum inhibitory and bactericidal concentrations in *S. faecalis*, 281
Cephalexin
antibacterial activity, 591
comparison with cefaclor, 157
in vitro susceptibility studies, 290
pharmacological and antimicrobial properties, 93
Cephalosporin
cefaclor, 490
cefaclor, in vitro activity, 442
cefatrizine, 231
Cephalosporinase
enzymatic and immunological characterization, 201
from *E. aerogenes*, 201
Cephalothin
blood, brain, and cerebrospinal fluid concentrations in rabbits, 710
penetration into fibrin clots, 688
susceptibility comparison with cefuroxime, 47
Cephalothin and cefazolin
comparative stability in buffer or human serum, 284
Cephamycin antibiotic
cefoxitin, 636
Cephradine
antibacterial activity, 591
Chartreusin
microbiological assay, 571
production, 571
Chlamydia trachomatis
antibiotic susceptibility, 673
antimicrobial activity of several antibiotics and a sulfonamide, 80
Chloramphenicol
M. osloensis growth, 573
Chronic urinary infection
methenamine, 625
Clavulanic acid binding
to penicillin-binding proteins, 406
Clindamycin, tinidazole and doxycycline
anaerobic wound infections, 563
Clostridium botulinum
inhibition by 5-nitrothiazoles, 353
Clotrimazole
antagonistic action of lipid components from *C. albicans*, 16
anti-*Candida* activity, 206
combined with dioctyl sodium sulfosuccinate, 206
Colistin
inducible high resistance in *Proteus* strains, 1
Conditional killing effect
staphylococcin 1580, 314
Cryptococcus neoformans
comparative study of trichothecin, amphotericin B, and 5-fluorocytosine, 390
Curative antimalarial activities and toxicities of primaquine
comparison with *d* and *l* isomers, 51
Cyclic thymineless death
increasing frequency of R-plasmid elimination, 555

3-Deazaguanosine
antiviral properties, 114
3-Deazaguanylic acid
antiviral agent, 114
3-Deazaguine,
antiviral properties, 114
Decanoate
effects on *B. subtilis*, 357
Desacetylcephalothin
penetration into fibrin clots, 682
Dioctyl sodium sulfosuccinate
anti-*Candida* activity, 206
combined with clotrimazole, 206
Disk diffusion susceptibility
correlated with netilmicin agar dilution, 288
Disodium phosphonoacetate
cream base, 510
treating herpes simplex virus in Cebus monkeys, 510
Doxycycline
compared with clindamycin, 563
Drug resistance loci
in *N. gonorrhoeae*, 444

Electrical impedance measurements
in broth dilution susceptibility tests, 61
EM 49
mechanism of action, 665
Enterobacter aerogenes
enzymatic and immunological characterization, 201
Enterobacteriaceae
spontaneous implantation of antibiotic-resistant, 697
syngery of trimethoprim and amikacin against, 349
Enterococcal endocarditis
penicillinase-resistant penicillins plus gentamicin, 484
Enterococci
resistance to aminoglycosidic aminocyclitol antibiotics, 401
synergy of penicillin-netilmicin combinations against, 195
Enveloped bacteriophage ϕ6
inactivation and inhibition of replication by fatty acids, 523
ery-2 locus
N. gonorrhoeae, 444
Erythromycin estolate
hepatotoxicity during pregnancy, 630
Escherichia coli
amoxycillin and ampicillin on morphology, 736
antimetabolite activity, 322
autolysin activation, 745
bactericidal activity of gentamicin and clindamycin or gentamicin and chloramphenicol, 135
carrying conjugative and nonconjugative R plasmids, 131
outer membrane as a permeability barrier to β-lactam antibodies, 368
susceptibility to kasugamycin, 131
tryptophan analogs, 322
Escherichia coli K-12
binding of thienamycin and clavulanic acid to penicillin-binding proteins, 406

Fatty acids
inactivating and inhibiting replication of bacteriophage ϕ6, 523
Fluoride ions
bacteriolytic action, 339
5-Fluorocytosine
against *C. neoformans*, 390
on *C. albicans* and *S. cerevisiae*, 255
Fluorocytosine
yeast susceptibility, 614
Folic acid antagonists
mutagenic studies, 84

Gentamicin
against enterobacteria and *P. aeruginosa*, 301
compared with netilmicin and tobramycin, 301
intravenous infusion rate, 606
nephrotoxicity in rats, 474
2′-*O*-phosphorylation by an *S. aureus* strain carrying a plasmid, 26
ototoxicity as compared with amikacin in cats, 178
penicillinase-resistant penicillin in enterococcal endocarditis, 484
plasmid-mediated resistance in *S. aureus*, 513
resistant bacteria in burn center, 688
Gentamicin accumulation
affected by membrane-energy mutations and cations, 163
Gentamicin and chloramphenicol
bactericidal activity against *E. coli* and *B. fragilis*, 135
Gentamycin and clindamycin
bactericidal activity against *E. coli* and *B. fragilis*, 135
Gentamicin and tobramycin
penetration into synovial fluid, 548
Gentamicin C_{2b}
biotransformation of sisomicin, 335
Gentamicin uptake
by rat renal cortical tissue, 192
Gram-negative infections
netilmicin, 503
Granulocytopenic cancer patients
amikacin and cephalothin, 618
Guanide agents
structural requirements for antiplaque activity, 721

Haemophilus
in vitro activity of rosamicin against, 293
Haemophilus influenzae
inhibition by trimethoprim-sulfamethoxazole, 649
Haemophilus influenzae B
ampicillin treatment, 461
Hemorrhagic cystitis
methicillin, 438
Hepatotoxicity
erythromycin estolate during pregnancy, 630
Herpes simplex virus
Cebus monkeys, 510
disodium phosphonoacetate as topical treatment of skin lesions, 510
latent infections, 577
skin lesions in Cebus monkeys, 510
Herpesviral replication

antiviral activity of arabinosylthymine, 243
Herpesvirus type 1
ribavirin resistance, 120
Hexachlorophene
effects on *B. subtilis*, 357
H2 incompatibility group
R plasmids of the S incompatibility group belonging to H2 incompatibility group, 431
Homoharringtonine
cell cycle specificity, 298
cytotoxicity, 298
Human interferon
in cell line MG-63, 11
Human leukemic leukocytes
6-mercaptopurine metabolism, 518
Human polymorphonuclear leukocytes
aminoglycosides on chemotactic response, 540
Human serum
comparative stability of cephalothin and cefazolin, 284

Imidazole antimycotics
clotrimazole, antagonistic action on *C. albicans*, 16
miconazole, antagonistic action on *C. albicans*, 16
Influenza A
oral ribavirin (Virazole), double-blind evaluation, 498
Interstitial fluid concentration
gentamicin intravenous infusion rate, 606
Intravenous infusion rate
gentamicin, 606
interstitial fluid concentration, 606
Iodine-containing compounds
antiplaque agents, 107
in vitro evaluation, 107
Isoniazid
electron transport pathway in *M. phlei*, 213
M. phlei, 529
specificity on growth inhibition and competition for an NAD^+ regulatory site, 213

Kanamycin
compared with penicillin-netilmicin combinations, 195
Kasugamycin
susceptibility of *E. coli* carrying conjugative and nonconjugative R plasmids, 131
Klebsiella aerogenes
R-plasmid-mediated β-lactamase, 126
Klebsiella pneumoniae
autolysin activation, 745

β-Lactam antibodies
E. coli outer membrane as a permeability barrier, 368
L1210 cells
6-mercaptopurine metabolism, 518

Macaca mulatta
amphotericin B and amphotericin B methyl ester, 582
Marine bacteria
antibiotic resistance, 373
Mecillanam
resistant variants in urine, 559
Mecillinam-resistant bacterial variants
growth properties in urine, 559
Membrane-active peptide antibiotic
EM 49, 665
Membrane-energy mutations and cations
effects on streptomycin and gentamicin accumulation by bacteria, 163
6-Mercaptopurine metabolism
human leukemic leukocytes, 518
L1210 cells, 518
Metal-tolerant bacteria
antibiotic resistance patterns, 545
isolated from an estuary, 545
Methadone
antimicrobial activity, 748
interaction with antibodies, 748
Methenamine
chronic urinary infection, 625
Methicillin
hemorrhagic cystitis, 438
Miconazole
antagonistic action of lipid components from *C. albicans*, 16
Minocycline
dose regimens, 642
side effects, 642
Moraxella osloensis
chloramphenicol, 573
penicillin G, 573
Morganocin 174
mode of action, 395
mtr locus
N. gonorrhoeae, 444
Multiple-antibiotic resistance
mediated by transferable plasmids, 261
S. faecalis subsp. *liquefaciens*, 261
Murine leukemia virus
differential susceptibility to ansaycin antibiotics, 4
Mutagenic studies
of folic acid antagonists, 84
Mycobacillin
lytic effects on erythrocytes, 124
Mycobacterium fortuitum complex
susceptibility of organisms to antituberculous and other antimicrobial agents, 295
Mycobacterium phlei
acquired resistance to isoniazid, 529
association with peroxidase, 529
catalases on the basis of susceptibility to isoniazid, 529
specificity of isoniazid on growth inhibition and competition for an NAD^+ regulatory site, 213

Nafcillin
antistaphylococcal activity by sisomicin and netilmicin, 346
pharmacokinetics in patients with renal failure, 98
Nalidixic acid
resistance in treatment of urinary tract infection, 678

Neisseria
in vitro activity of rosamicin, 293
Neisseria gonorrhoeae
auxotypes and penicillin susceptibilities, 147
drug resistance loci, 444
ery-2 locus, 444
isolated from patients involving two or more sites, 147
mtr locus, 444
penicillinase-producing, 703
p-hydroxybenzyl penicillin (penicillin X), 31
rapid microacidometric test, 703
transfer of plasmid-borne β-lactamase, 270
Nephrotoxicity
gentamicin in rats, 474
netilmicin in rats, 474
Netilmicin
against enterobacteria and *P. aeruginosa*, 301
agar dilution and disk diffusion susceptibilities, 288
clinical and biological evaluation, 503
clinical pharmacology, 717
compared with gentamicin and tobramycin, 301
enhancing staphylococcal activity of nafcillin and oxacillin, 346
gram-negative infection, 503
high-pressure liquid chromatographic assay, 707
nephrotoxicity in rats, 474
pharmacokinetics, 122
Netilmicin pharmacokinetics
elderly male patients, 328
single intravenous doses, 328
5-Nitrothiazoles
Inhibiting *C. botulinum*, 353
Nonconjugative plasmids
encoding sulfanilamide resistance, 418
Novobiocin
eliminating plasmids from several bacterial species, 423

Octapeptin
membrane-active peptide antibiotic, 665
2″-*O*-phosphorylation
of gentamicin components by an *S. aureus* strain carrying a plasmid, 26
Oral ribavirin
double-blind evaluation, 498
Oral ribavirin (Virazole)
experimental influenza A virus, 498
Oxacillin
antistaphylococcal activity by sisomicin and netilmicin, 346
Oxidized nicotinamide adenine dinucleotide regulatory site
on electron transport pathway in *M. phlei*, 213
specificity of isoniazid on growth inhibition and competition, 213

Parenteral cephalosporin
[^{14}C]cefamandole in rats and dogs, 73
Penicillin
synergistic activity with aminoglycosidic aminocyclitol antibiotics among enterococci, 401
Penicillinase-producing *Neisseria gonorrhoeae*
rapid microacidometric test, 703
Penicillinase-resistant penicillins plus gentamicin
enterococcal endocarditis, 484
Penicillin-binding proteins
binding of thienamycin and clavulanic acid, 406
of *E coli* K-12, 406
Penicillin G
blood, brain, and cerebrospinal fluid concentrations in rabbits, 710
M. osloensis growth, 573
Penicillin-netilmicin combinations
synergy against enterococci including strains highly resistant to streptomycin or kanamycin, 195
Penicillins
activation of autolysins, 745
Penicillin susceptibilities
of *N. gonorrhea* from patients with gonorrhea, 147
Pentamidine isethionate
platelet function and coagulation inhibition, 451
Peroxidase
M. phlei, 529
Photodensitometric technique
antiviral activity against swine influenza virus, 660
quantifying microscopic lung lesions in mice, 660
p-Hydroxybenzyl penicillin
in vitro activity against *N. gonorrhoeae*, 31
Plasmid-borne beta-lactamase
transfer in *N. gonorrhoeae*, 270
Plasmid pPL7065
B. pumilus specifying host function, 435
Plasmids
elimination from several bacterial species by novobiocin, 423
Polymyxin B
multiresistant *S. marcescens* infections, 655
Polyriboinosinic-polyribocytidylic acid complex
systemic metabolic alterations, 602
Primaquine
curative antimalarial activities and toxicities, 51
d and *l* isomers, 51
Proteus strains
inducible high resistance to colistin, 1
Pseudomonas aeruginosa
activity of netilmicin compared with those of gentamicin and tobramycin, 301
beta-lactam antibiotic resistance, 537
synergy of trimethoprim and amikacin against, 349

Rapid microacidometric test
penicillinase-producing *N. gonorrhoeae*, 703
Rapid microdilution-colorimetric assay
yeast susceptibility to fluorocytosine, 614
Renal cortical tissue
in rats, 192
Renal failure
pharmacokinetics of nafcillin, 98
Ribavirin
effects on arterial blood pH and gas tensions and lung water content in A2 influenza-infected mice, 40
herpesvirus type 1 resistance, 120
rotavirus gastroenteritis in mice, 543
Rifampin
multiresistant *S. marcescens* infections, 655

Rimantadine
effects on arterial blood pH and gas tensions and lung water content in A2 influenza-infected mice, 40
Rosamicin
against *Neisseria* and *Haemophilus*, 293
in dog and rat urethral and vaginal secretions, 237
macrolide antibiotic, 237
treating bacterial prostatitis, 240
Rotavirus gastroenteritis
antiviral activity of ribavirin in mice, 543
R-plasmid elimination
frequency increased by cyclic thymineless death, 555
R-plasmid-mediated β-lactamase
from *K. aerogenes*, 126
R plasmids
carried by *E. coli*, 131
R plasmids
conjugative and nonconjugative, 131
R plasmids
S incompatibility group belonging to H2 incompatibility group, 431

Saccharomyces cerevisiae
morphological changes as a result of 5-fluorocytosine, 255
physiologically affected by an antimycotic azasterol, 185
Serratia marcescens
polymyxin B and rifampin regimen, 655
Serum bactericidal activity
streptococcal endocarditis in rabbits, 479
S incompatibility group
R plasmids belong to H2 incompatibility group, 431
Single plasmid clone
spread to an untreated individual from a person receiving prolonged tetracycline therapy, 219
Sisomicin
biotransformation to Gentamicin C_{2a}, 335
enhancing staphylococcal activity of nafcillin and oxacillin, 346
Spectinomycin
activity against anaerobes, 37
against recent urinary tract isolates, 551
Spleen focus-forming virus
differential susceptibility to ansaycin antibiotics, 4
Staphylococcus aureus
2′-*O*-phosphorylation of gentaminin components, 26
plasmid resistance to gentamicin, 513
repair of sublethal injury, 314
Streptococcal endocarditis
antibiotic concentrations in serum, serum bactericidal activity, and results of therapy, 479
in rabbits, 479
Streptococcus cremoris
acriflavine-resistant mutant, 383
Streptococcus faecalis
cell wall antibiotics, 281
temperature effects on minimum inhibitory and bactericidal concentrations of cell wall antibiotics, 281
Streptococcus faecalis subsp. *liquefaciens*
transferable plasmids mediating multiple-antibiotic resistance, 261
Streptococcus pyogenes
drug resistance in Japan, 427
Streptomycin
compared with penicillin-netilmicin combinations, 195
Streptomycin accumulation
affected by membrane-energy mutations and cations, 163
Sulfanilamide resistance
encoded by nonconjugative plasmids, 418
Swine influenza virus
antiviral activity, 660
photodensitometry quantifying mice microscopic lung lesions, 660

T-1220
antibacterial activity, 455
Tetracycline
prolonged therapy, 219
Thienamycin binding
to penicillin-binding proteins of *E. coli*, 406
Tinidazole
compared with clindamycin and doxycycline, 563
Tobramycin
against enterobacteria and *P. aeruginosa*, 301
blood, brain, and cerebrospiral fluid concentrations in rabbits, 710
compared with netilmicin and gentamicin, 301
effect of cefamandole nafate, 465
resistant bacteria in burn center, 688
Tolciclate
antimycotic studies, 429
Transferable plasmids
mediating multiple-antibiotic resistance in *S. faecalis* subsp. *liquefaciens*, 261
Trichothecin
against *C. neoformans*, 390
Trimethoprim
synergy with amikacin against gram-negative bacilli, 349
Trimethoprim-sulfamethoxazole
inhibition of *H. influenza*, 649
single twelve-tablet dose, 102
Tryptophan analogs
effects and transport in *E. coli*, 322

Uncomplicated genitourinary gonorrhea
single twelve-tablet dose of trimethoprim-sulfamethoxazole, 102
Urinary tract isolates
in vitro activity of spectinomycin, 551

Virazole
oral ribavirin in influenza A virus, 498

Wilkins-Chalgren anaerobic susceptibility testing medium
stability of antibiotics, 440

Yeast susceptibility
fluorocytosine, 614

Zone diameter interpretative standards
need for changes, 688

INDEX TO DATE OF ISSUE

Month	Date of Issue	Pages
July	16 July 1977	1–130
August	19 August 1977	131–300
September	13 September 1977	301–447
October	15 October 1977	449–557
November	10 November 1977	559–647
December	8 December 1977	649–751

Biosynthesis; Chemistry; Mechanisms of Action and Resistance

Inducible High Resistance to Colistin in *Proteus* Strains. SHOJI SHIMIZU,* SHIZUKO IYOBE, AND SUSUMU MITSUHASHI 1

Human Interferon: Mass Production in a Newly Established Cell Line, MG-63. A. BILLIAU,* V. G. EDY, HUBERTINE HEREMANS, J. VAN DAMME, J. DESMYTER, J. A. GEORGIADES, AND P. DE SOMER 11

Antagonistic Action of Lipid Components of Membranes from *Candida albicans* and Various Other Lipids on Two Imidazole Antimycotics, Clotrimazole and Miconazole. HIDEYO YAMAGUCHI 16

2''-*O*-Phosphorylation of Gentamicin Components by a *Staphylococcus aureus* Strain Carrying a Plasmid. F. LE GOFFIC,* A. MARTEL, N. MOREAU, M. L. CAPMAU, C. J. SOUSSY, AND J. DUVAL 26

Lytic Effect of Mycobacillin and Its Derivatives on Erythrocytes. P. C. BANERJEE 124

Novel R-Plasmid-Mediated Beta-Lactamase from *Klebsiella aerogenes*. V. PETROCHEILOU, R. B. SYKES, AND M. H. RICHMOND* 126

Physiological Effects and Microbial Susceptibility

Differential Susceptibility of Spleen Focus-Forming Virus and Murine Leukemia Viruses to Ansaycin Antibiotics. JULIUS S. HOROSZEWICZ,* SUSAN S. LEONG, AND WILLIAM A. CARTER 4

In Vitro Activity of *p*-Hydroxybenzyl Penicillin (Penicillin X) and Five Other Penicillins Against *Neisseria gonorrhoeae*: Comparisons of Strains from Patients with Uncomplicated Infections and from Women with Pelvic Inflammatory Disease. STEPHEN G. SACKEL, SUSAN ALPERT, BERNARD ROSNER, WILLIAM MCCORMACK,* AND MAXWELL FINLAND 31

Activity of Spectinomycin Against Anaerobes. JON E. ROSENBLATT* AND ALICE M. GERDTS 37

Cefuroxime, A New Parenteral Cephalosporin: Collaborative In Vitro Susceptibility Comparison with Cephalothin Against 5,887 Clinical Bacterial Isolates. RONALD N. JONES,* PETER C. FUCHS, THOMAS L. GAVAN, E. HUGH GERLACH, A. L. BARRY, AND CLYDE THORNSBERRY 47

Comparison of the Curative Antimalarial Activities and Toxicities of Primaquine and Its *d* and *l* Isomers. L. H. SCHMIDT,* SHEILA ALEXANDER, LINDA ALLEN, AND JANE RASCO 51

Electrical Impedance Measurements in the Reading and Monitoring of Broth Dilution Susceptibility Tests. H. J. COLVIN AND J. C. SHERRIS* 61

Antimicrobial Activity of Several Antibiotics and a Sulfonamide Against *Chlamydia trachomatis* Organisms in Cell Cultures. CHO-CHOU KUO,* SAN-PIN WANG, AND J. THOMAS GRAYSTON 80

Mutagenic Studies of Folic Acid Antagonists. C. S. GENTHER, R. S. SCHOENY, J. C. LOPER, AND C. C. SMITH* 84

Antiviral Activity of 3-Deazaguanine, 3-Deazaguanosine, and 3-Deazaguanylic Acid. LOIS B. ALLEN,* JOHN H. HUFFMAN, P. DAN COOK, RICH B. MEYER, JR., ROLAND K. ROBINS, AND ROBERT W. SIDWELL 114

Failure of Type 1 Herpesvirus to Develop Resistance to Ribavirin. LOIS B. ALLEN,* CHRISTINA M. FINGAL, AND JOHN H. HUFFMAN 120

Pharmacology and Therapeutics

Effects of Small-Particle Aerosols of Rimantadine and Ribavirin on Arterial Blood pH and Gas Tensions and Lung Water Content of A2 Influenza-Infected Mice. J. B. ARENSMAN, J. W. DOMINIK, AND D. E. HILMAS* 40

* Asterisk refers to person to whom inquiries regarding the paper should be addressed.

Delineation of the Relative Antibacterial Activity of Cefamandole and Cefamandole Nafate. J. R. TURNER,* DAVID PRESTON, AND J. S. WOLD 67

Metabolic Fate of [^{14}C]Cefamandole, a Parenteral Cephalosporin Antibiotic, in Rats and Dogs. H. R. SULLIVAN,* S. L. DUE, D. L. K. KAU, J. F. QUAY, AND W. M. MILLER 73

Comparison of Pharmacological and Antimicrobial Properties of Cefadroxil and Cephalexin. A. I. HARTSTEIN,* K. E. PATRICK, S. R. JONES, M. J. MILLER, AND R. E. BRYANT 93

Pharmacokinetics of Nafcillin in Patients with Renal Failure. CARLOS R. DIAZ, JAMES G. KANE,* RICHARD H. PARKER, AND FRANK R. PELSOR 98

Pharmacokinetics and Tolerance of a Single Twelve-Tablet Dose of Trimethoprim (960 mg)-Sulfamethoxazole (4,800 mg). ROBERT J. FASS,* RICHARD B. PRIOR, AND ROBERT L. PERKINS 102

In Vitro Evaluation of Three Iodine-Containing Compounds as Antiplaque Agents. J. M. TANZER,* A. M. SLEE, B. KAMAY, AND E. R. SCHEER..... 107

Pharmacokinetic Study of Netilmicin. BURT R. MEYERS, SHALOM Z. HIRSCHMAN,* GARY WORMSER, AND DAVID SIEGEL 122

Errata

Characterization of an R-Plasmid Associated with Ampicillin Resistance in *Shigella dysenteriae* Type 1 Isolated from Epidemics. JORGE H. CROSA,* JORGE OLARTE, LEONARDO J. MATA, LINDA K. LUTTROPP, AND MARIA PEÑARANDA 129

Side Effects of Minocycline: A Double-Blind Study. W. LEE FANNING, DIETER W. GUMP,* AND ROBERT A. SOFFERMAN 130

Volume 12 Contents for August Number 2

Biosynthesis; Chemistry; Mechanisms of Action and Resistance

Susceptibility to Kasugamycin of *Escherichia coli* Carrying Conjugative and Nonconjugative R Plasmids. HIROFUMI DANBARA* AND MASANOSUKE YOSHIKAWA 131

Antimicrobial Activity of Amine Oxides: Mode of Action and Structure-Activity Correlation. JÚLIUS ŠUBÍK,* GIZELA TAKÁCSOVÁ, MIKULÁŠ PŠENÁK, AND FERDINAND DEVÍNSKY..... 139

Effects of Membrane-Energy Mutations and Cations on Streptomycin and Gentamicin Accumulation by Bacteria: a Model for Entry of Streptomycin and Gentamicin in Susceptible and Resistant Bacteria. L. E. BRYAN* AND H. M. VAN DEN ELZEN 163

Enzymatic and Immunological Characterization of a New Cephalosporinase from *Enterobacter aerogenes*. ROBERT LETARTE,* MARLYSE DEVAUD-FELIX, JEAN-CLAUDE PECHERE, AND DIANE ALLARD-LEPROHON..... 201

Specificity of Isoniazid on Growth Inhibition and Competition for Oxidized Nicotinamide Adenine Dinucleotide Regulatory Site on the Electron Transport Pathway in *Mycobacterium phlei*. WILLIAM B. DAVIS AND MORTON M. WEBER* .. 213

Antiviral Activity of Arabinosylthymine in Herpesviral Replication: Mechanism of Action In Vivo and In Vitro. J. F. ASWELL, G. P. ALLEN, A. T. JAMIESON, D. E. CAMPBELL, AND G. A. GENTRY* 243

Transferable Plasmids Mediating Multiple-Antibiotic Resistance in *Streptococcus faecalis* subsp. *liquefaciens*. H. P. MARDER* AND F. H. KAYSER 261

Transfer of Plasmid-Borne Beta-Lactamase in *Neisseria gonorrhoeae*. ELLEN S. BARON, ARTHUR K. SAZ,* DENNIS J. KOPECKO, AND JOHN A. WOHLIETER ... 270

Cytotoxicity and Cell Cycle Specificity of Homoharringtonine. D. M. BAASKE AND PETER HEINSTEIN* 298

Physiological Effects and Microbial Susceptibility

Bactericidal Activity of the Combinations of Gentamicin with Clindamycin or Chloramphenicol Against Species of *Escherichia coli* and *Bacteroides fragilis*. JEAN KLASTERSKY* AND MIREILLE HUYSSON 135

Auxotypes and Penicillin Susceptibilities of *Neisseria gonorrhoeae* Isolated from Patients with Gonorrhea Involving Two or More Sites. B. WESLEY CATLIN* AND PAUL J. PACE 147

Physiological Effects of an Antimycotic Azasterol on Cultures of *Saccharomyces cerevisiae*. P. R. HAYS, W. D. NEAL, AND L. W. PARKS* 185

Anti-*Candida* Activity of Clotrimazole in Combination with Dioctyl Sodium Sulfosuccinate and Other Surfactants. KAZUO IWATA AND HIDEYO YAMAGUCHI* 206

Spread of a Single Plasmid Clone to an Untreated Individual from a Person Receiving Prolonged Tetracycline Therapy. V. PETROCHEILOU, M. H. RICHMOND,* AND P. M. BENNETT 219

Morphological Changes in Yeasts as a Result of the Action of 5-Fluorocytosine. TADASHI ARAI,* YUZURU MIKAMI, KOJI YOKOYAMA, TOMIO KAWATA, AND KUNIYOSHI MASUDA 255

Temperature Effects on Minimum Inhibitory and Bactericidal Concentrations of Cell Wall Antibiotics in *Streptococcus faecalis*. EILEEN T. HINKS, LOLITA DANEO-MOORE,* AND SHIRLEY BRAVERMAN 281

Comparative Stability of Cephalothin and Cefazolin in Buffer or Human Serum. DONALD PITKIN, PAUL ACTOR,* JOHN J. FILAN, RODERICK WHITE, AND JERRY A. WEISBACH 284

Simple Method for Elimination of Aminoglycosides from Serum to Permit Bioassay of Other Antimicrobial Agents. PAUL STEVENS* AND LOWELL S. YOUNG 286

Correlation of Netilmicin Agar Dilution and Disk Diffusion Susceptibilities. DONALD A. GOLDMANN,* GEORGIA PH. SYRIOPOULOU, AND ANNE MARKLEY SEMPLE 288

In Vitro Susceptibility Studies with Cefaclor and Cephalexin. W. MICHAEL SCHELD, OKSANA M. KORZENIOWSKI, AND MERLE A. SANDE* 290

In Vitro Activity of Rosamicin Against *Neisseria* and *Haemophilus*, Including Penicillinase-Producing Strains. CHRISTINE C. SANDERS* AND W. EUGENE SANDERS, JR. 293

Susceptibility of Organisms in the *Mycobacterium fortuitum* Complex to Antituberculous and Other Antimicrobial Agents. W. EUGENE SANDERS, JR.,* ELDERT C. HARTWIG, NATHAN J. SCHNEIDER, ROBERT CACCIATORE, AND HENRY VALDEZ 295

Pharmacology and Therapeutics

Comparative Pharmacology of Cefaclor and Cephalexin. OKSANA M. KORZENOWSKI, W. MICHAEL SCHELD, AND MERLE A. SANDE* 157

Comparative Ototoxicity of Amikacin and Gentamicin in Cats. E. F. CHRISTENSEN,* J. C. REIFFENSTEIN, AND H. MADISSOO 178

In Vitro Uptake of Gentamicin by Rat Renal Cortical Tissue. CHEN H. HSU,* THEODORE W. KURTZ, AND JOHN M. WELLER 192

Synergy of Penicillin-Netilmicin Combinations Against Enterococci Including Strains Highly Resistant to Streptomycin or Kanamycin. CHRISTINE C. SANDERS 195

Neutrophil Toxicity of Amphotericin B. C. JOHN CHUNN,* P. R. STARR, AND DAVID N. GILBERT 226

Maternal-Fetal Pharmacology of Cefatrizine in the First 20 Weeks of Pregnancy. BETTY BERNARD,* PAUL THIELEN, SALVADOR J. GARCIA-CÁZARES, AND CHARLES A. BALLARD 231

Rosamicin in Urethral and Vaginal Secretions and Tissues in Dogs and Rats. UDO HOYME, AXEL BAUMUELLER, AND P. O. MADSEN* 237

Rosamicin—a New Drug for the Treatment of Bacterial Prostatitis. AXEL BAUMUELLER, UDO HOYME, AND PAUL O. MADSEN* 240

Volume 12

Contents for September

Number 3

Biosynthesis; Chemistry; Mechanisms of Action and Resistance

Conditional Killing Effect of Staphylococcin 1580 and Repair of Sublethal Injury in *Staphylococcus aureus*. A. WEERKAMP,* W. GEERTS, AND G. D. VOGELS ... 314

Detection of Antimetabolite Activity: Effects and Transport of Tryptophan Analogs in *Escherichia coli*. JONATHAN KUHN* 322

Biotransformation of Sisomicin to Gentamicin C_{2b}. B. K. LEE,* J. V. BAILEY, R. G. CONDON, J. A. MARQUEZ, G. H. WAGMAN, AND M. J. WEINSTEIN 335

Comparison of the Effects of Two Lipophilic Acids, Hexachlorophene and Decanoate, on *Bacillus subtilis*. BARBARA CHERNOV LEVIN* AND ERNST FREESE 357

Function of the Outer Membrane of *Escherichia coli* as a Permeability Barrier to Beta-Lactam Antibiotics. WILLY ZIMMERMANN* AND ARMEL ROSSELET 368

Mode of Action of Morganocin 174. J. A. WILLIAMS* AND K. KRIZSANOVICH-WILLIAMS 395

Binding of Thienamycin and Clavulanic Acid to the Penicillin-Binding Proteins of *Escherichia coli* K-12. BRIAN G. SPRATT,* VINAY JOBANPUTRA, AND WILLY ZIMMERMANN 406

Bacteriocin from *Actinomyces odontolyticus* with Temperature-Dependent Killing Properties. COLIN K. FRANKER,* C. ACHILLE HERBERT, AND STUART UEDA .. 410

Nonconjugative Plasmids Encoding Sulfanilamide Resistance. SUSUMU MITSUHASHI,* KUNIO INOUE, AND MATSUHISA INOUE 418

Elimination of Plasmids from Several Bacterial Species by Novobiocin. GAIL L. McHUGH AND MORTON N. SWARTZ* 423

R Plasmids of the S Incompatibility Group Belong to the H2 Incompatibility Group. DIANE E. TAYLOR* AND ROBERT B. GRANT 431

Host Function Specified by *Bacillus pumilus* Plasmid pPL7065. P. S. LOVETT,* E. J. DUVALL, M. G. BRAMUCCI, AND R. TAYLOR 435

Physiological Effects and Microbial Susceptibility

Activity of Netilmicin Compared with Those of Gentamicin and Tobramycin Against Enterobacteria and *Pseudomonas aeruginosa*. PAUL CHADWICK,* SHEILA SALMON, AND BEVERLEY TAYLOR 301

Sensitive, Rapid, and Specific Bioassay for the Determination of Antilipogenic Compounds. S. ULITZUR AND I. GOLDBERG* 308

Bacteriolytic Action of Fluoride Ions. ROBERT J. LESHER, GARY R. BENDER, AND ROBERT E. MARQUIS* 339

Enhancement of Antistaphylococcal Activity of Nafcillin and Oxacillin by Sisomicin and Netilmicin. CHATRCHAI WATANAKUNAKORN* AND CHERYL GLOTZBECKER 346

Synergistic Activity of Trimethoprim and Amikacin Against Gram-Negative Bacilli. THOMAS L. PARSLEY, RICHARD B. PROVONCHEE, CAROLINE GLICKSMAN, AND STEPHEN H. ZINNER* 349

Inhibition of *Clostridium botulinum* by 5-Nitrothiazoles. M. DYMICKY,* C. N. HUHTANEN, AND A. E. WASSERMAN 353

Plasmids Carried by Antibiotic-Resistant Marine Bacteria. RONALD K. SIZEMORE AND R. R. COLWELL* 373

Acriflavine-Resistant Mutant of *Streptococcus cremoris*. R. P. SINHA 383

Resistance to Six Aminoglycosidic Aminocyclitol Antibiotics Among Enterococci: Prevalence, Evolution, and Relationship to Synergism with Penicillin. SUSAN ADAMS CALDERWOOD, CHRISTINE WENNERSTEN, ROBERT C. MOELLERING, JR.,* LAWRENCE J. KUNZ, AND DONALD J. KROGSTAD 401

Drug Resistance in *Streptococcus pyogenes* Isolated in Japan (1974–1975). MASATAKA NAKAE, TEIKO MURAI, YOSHINORI KANEKO, AND SUSUMU MITSUHASHI* 427

Tolciclate: Further Antimycotic Studies. A. BIANCHI, G. MONTI, AND I. DE CARNERI* 429

Stability of Antibiotics in Wilkings-Chalgren Anaerobic Susceptibility Testing Medium After Prolonged Storage. R. J. ZABRANSKY* and K. J. HAUSER 440

Identification of Drug Resistance Loci in Various Clinical Isolates of *Neisseria gonorrhoeae*. THOMAS W. MAIER, PATRICIA WARNER, LEONARD ZUBRYZYCKI,* AND MARIA CHILA 444

Pharmacology and Therapeutics

Netilmicin Pharmacokinetics After Single Intravenous Doses to Elderly Male Patients. PETER G. WELLING,* AXEL BAUMUELLER, CURTIS C. LAU, AND PAUL O. MADSEN 328

Comparative Study of Trichothecin, Amphotericin B, and 5-Fluorocytosine Against *Cryptococcus neoformans* In Vitro and In Vivo. M. R. SNELLER,* A. HARIRI, W. G SORENSON, AND H. W. LARSH 390

Methicillin Hemorrhagic Cystitis. R. BRACIS, C. V. SANDERS, AND D. N. GILBERT* 438

In Vitro Activity of Cefaclor, a New Orally Administered Cephalosporin Antibiotic. JEROME SANTORO AND MATTHEW E. LEVISON* 442

Erratum

Bacteriostatic and Bactericidal Activities of Selected Beta-Lactam Antibiotics Studied on Agar Plates. GOHTA MASUDA, SUSUMU TOMIOKA, HIROSHI UCHIDA, AND MITSUTO HASEGAWA 447

Volume 12 Contents for October Number 4

Biosynthesis; Chemistry; Mechanisms of Action and Resistance

Plasmid-Mediated Resistance to Gentamicin in *Staphylococcus aureus*. DAVID O. WOOD, MARY JO CARTER, AND GARY K. BEST* 513

Comparative Study of 6-Mercaptopurine Metabolism in Human Leukemic Leukocytes and L1210 Cells. TOMIHIKO HIGUCHI,* TORU NAKAMURA, HARUTO UCHINO, AND GYOICHI WAKISAKA 518

Inactivation and Inhibition of Replication of the Enveloped Bacteriophage $\phi 6$ by Fatty Acids. JEFFREY A. SANDS 523

Differentiation of Catalases in *Mycobacterium phlei* on the Basis of Susceptibility to Isoniazid: Association with Peroxidase and Acquired Resistance to Isoniazid. WILLIAM B. DAVIS* AND DAVID M. PHILLIPS 529

Factors Involved in Beta-Lactam Antibiotic Resistance in *Pseudomonas aeruginosa*. HITOSHI OHMORI,* AKIKO AZUMA, YOJI SUZUKI, AND YOSHINOBU HASHIMOTO 537

Effect of Aminoglycosides on the Chemotactic Response of Human Polymorphonuclear Leukocytes. GLENN L. GOODHART 540

Antibiotic Resistance Patterns of Metal-Tolerant Bacteria Isolated from an Estuary. D. A. ALLEN, B. AUSTIN, AND R. R. COLWELL* 545

Cyclic Thymineless Death Significantly Increases Frequency of R-Plasmid Elimination. M. J. TRIBE AND R. J. PINNEY* 555

Physiological Effects and Microbial Susceptibility

Comparative Susceptibility of *Candida albicans* to Amphotericin B and Amphotericin B Methyl Ester. ROBERT M. BANNATYNE* AND ROSE CHEUNG 449

In Vitro and In Vivo Antibacterial Activity of T-1220, a New Semisynthetic Penicillin. K. UEO, Y. FUKUOKA, T. HAYASHI, T. YASUDA, H. TAKI, M. TAI, Y. WATANABE, I. SAIKAWA, AND S. MITSUHASHI* 455

In-Use Evaluation of a Prediluted Quantitative Antibiotic Susceptibility Test Device. RICHARD C. TILTON* AND HENRY D. ISENBERG 470

In Vitro Studies with Cefaclor, a New Oral Cephalosporin. CHRISTINE C. SANDERS* 490

Agar Shake Tube Technique for Simultaneous Determination of Aerobic and Anaerobic Susceptibility to Antibiotics. JAMES B. EVANS* AND LIZZIE J. HARRELL 534

Discrepant Results of Amphotericin B Assays on Fresh Versus Frozen Serum Samples. R. M. BANNATYNE* AND R. CHEUNG 550

In Vitro Activity of Spectinomycin Against Recent Urinary Tract Isolates. ROBERT J. FASS* AND RICHARD B. PRIOR 551

Pharmacology and Therapeutics

In Vitro Inhibition of Platelet Function and Coagulation by Pentamidine Isethionate. SANFORD J. KEMPIN, CARL W. JACKSON,* AND CAROL C. EDWARDS 451

Beta-Lactamase Effect on Ampicillin Treatment of *Haemophilus influenzae* B Bacteremia and Meningitis in Infant Rats. E. RICHARD MOXON,* ANTONE A. MEDEIROS, AND THOMAS F. O'BRIEN 461

Effect of Cefamandole Nafate on the Toxicity of Tobramycin. J. S. WOLD,* S. A. TURNIPSEED, W. D. BRODDLE, AND N. V. OWEN 465

Comparison of the Nephrotoxicity of Netilmicin and Gentamicin in Rats. RALPH L. BOWMAN, FREDRICK J. SILVERBLATT, AND GEORGE J. KALOYANIDES* 474

Antibiotic Concentrations in Serum, Serum Bactericidal Activity, and Results of Therapy of Streptococcal Endocarditis in Rabbits. JAIME CARRIZOSA AND DONALD KAYE* 479

Penicillinase-Resistant Penicillins Plus Gentamicin in Experimental Enterococcal Endocarditis. LAWRENCE J. LINCOLN, MOLLY GALLAGHER, ALLAN J. WEINSTEIN, AND ELIAS ABRUTYN* 484

Double-Blind Evaluation of Oral Ribavirin (Virazole) in Experimental Influenza A Virus Infection in Volunteers. C. RICHARD MAGNUSSEN,* R. GORDON DOUGLAS, JR., ROBERT F. BETTS, FRIEDA K. ROTH, AND MARY PAT MEAGHER 498

Clinical and Bacteriological Evaluation of Netilmicin in Gram-Negative Infections. J. KLASTERSKY,* F. MEUNIER-CARPENTIER, L. COPPENS-KAHAN, D. DANEAU, AND J. M. PREVOST 503

Disodium Phosphonoacetate in Cream Base as a Possible Topical Treatment for Skin Lesions of Herpes Simplex Virus in Cebus Monkeys. AMOS E. PALMER,* WILLIAM T. LONDON, AND JOHN L. SEVER 510

Antiviral Activity of Ribavirin in Rotavirus Gastroenteritis of Mice. BARRY D. SCHOUB* AND O. W. PROZESKY 543

Gentamicin and Tobramycin Penetration into Synovial Fluid. THOMAS H. DEE* AND FRANKLIN KOZIN 548

Errata

Renal Pharmacology of Netilmicin. PETER J. S. CHIU, GEORGE H. MILLER, ARTHUR D. BROWN, JAMES F. LONG, AND J. ALLAN WAITZ 557

Susceptibility of *Clostridium perfringens* Isolated from Human Infections to Twenty Antibiotics. JOSEPH D. SCHWARTZMAN, L. BARTH RELLER, AND WEN-LAN L. WANG 557

Volume 12 Contents for November Number 5

Biosynthesis; Chemistry; Mechanisms of Action and Resistance

Growth Properties of Mecillinam-Resistant Bacterial Variants in Urine. J. D. ANDERSON,* M. A. ADAMS, H. M. WEBSTER, AND L. SMITH 559

Chartreusin: Production and Microbiological Assay. LADISLAV J. HAŇKA* AND S. A. GERPHEIDE 571

Physiological Effects and Microbial Susceptibility

Unusual Effects of Penicillin G and Chloramphenicol on the Growth of *Moraxella osloensis*. ROBERT J. DELEYS AND ELLIOT JUNI* 573

Comparison of In Vitro Antibacterial Activity of Three Oral Cephalosporins: Cefaclor, Cephalexin, and Cephradine. MICHAEL S. SILVER, GEORGE W. COUNTS,* DOLORES ZELEZNIK, AND MARVIN TURCK 591

Inhibition of Acetylating Activity in an Enzymatic Assay for Aminoglycoside Antibiotics. BARBARA H. MINSHEW,* SUSAN R. SWANZY, AND FRITZ D. SCHOENKNECHT 597

In Vitro Activities of Five Oral Cephalosporins Against Aerobic Pathogenic Bacteria. SMITH SHADOMY,* GERALD WAGNER, AND MELINDA CARVER 609

Rapid Microdilution-Colorimetric Assay for Yeast Susceptibility to Fluorocytosine. BRUCE D. FISHER AND DONALD ARMSTRONG* 614

Pharmacology and Therapeutics

Anaerobic Wound Infections in Cancer Patients: Comparative Trial of Clindamycin, Tinidazole, and Doxycycline. J. KLASTERSKY,* M. HUSSON, D. WEERTS-RUHL, AND D. DANEAU 563

Latent Herpes Simplex Virus Infections in Sensory Ganglia of Mice After Topical Treatment with Adenine Arabinoside and Adenine Arabinoside Monophosphate. RICHARD J. KLEIN* AND ALVIN E. FRIEDMAN-KIEN 577

Comparative Pharmacology of Amphotericin B and Amphotericin B Methyl Ester in the Non-Human Primate, Macaca Mulatta. F. A. JAGDIS, P. D. HOEPRICH,* R. M. LAWRENCE, AND C. P. SCHAFFNER 582

Systemic Metabolic Alterations Associated with Repeated Injections of a Modified Polyriboinosinic-Polyribocytidylic Acid Complex. MICHAEL C. POWANDA,* MYRL L. SAMMONS, AND EDWARD L. STEPHEN 602

Gentamicin Intravenous Infusion Rate: Effect on Interstitial Fluid Concentration. ALAN J. KOZAK,* DALE N. GERDING, LANCE R. PETERSON, AND WENDELL H. HALL 606

Amikacin and Cephalothin: Empiric Regimen for Granulocytopenic Cancer Patients. DAVIS M. HAHN,* STEPHEN C. SCHIMPFF, VIOLA MAE YOUNG, CLARENCE L. FORTNER, HAROLD C. STANDIFORD, AND PETER H. WIERNIK 618

Lack of Effect of Methenamine in Suppression of, or Prophylaxis Against, Chronic Urinary Infection. BERNARDO VAINRUB AND DANIEL M. MUSHER* 625

Hepatotoxicity of Erythromycin Estolate During Pregnancy. WILLIAM M. MCCORMACK,* HARVEY GEORGE, ALAN DONNER, LORRAINE F. KODGIS, SUSAN ALPERT, ERNEST W. LOWE, AND EDWARD H. KASS 630

Results of a Clinical Trial of Cefoxitin, a New Cephamycin Antibiotic. RICHARD V. MCCLOSKEY 636

Side Effects of Minocycline: Different Dosage Regimens. DIETER W. GUMP,* TAKA ASHIKAGA, THEODORE J. FINK, AND ALAN M. RADIN 642

Errata

Comparison of the Curative Antimalarial Activities and Toxicities of Primaquine and Its *d* and *l* Isomers. L. H. SCHMIDT, SHEILA ALEXANDER, LINDA ALLEN, AND JANE RASCO 647

Penetration of Cefazolin into Pleural Fluid. DONALD R. COLE AND JUANITO PUNG 647

Volume 12 Contents for December Number 6

Biosynthesis; Chemistry; Mechanisms of Action and Resistance

Mechanism of Action of EM 49, Membrane-Active Peptide Antibiotic. KEN S. ROSENTHAL, ROD A. FERGUSON, AND DAN R. STORM* 665

Spontaneous Implantation of Antibiotic-Resistant *Enterobacteriaceae* in the Digestive Tract of Chickens in the Absence of Selective Pressure. J. F. GUILLOT,* ELISABETH CHASLUS-DANCLA, AND J. P. LAFONT 697

Comparative Effects of Amoxycillin and Ampicillin on the Morphology of *Escherichia coli* In Vivo and Correlation with Activity. K. R. COMBER, R. J. BOON, AND R. SUTHERLAND* 736

Physiological Effects and Microbial Susceptibility

Quantitative Inhibition of *Haemophilus influenzae* by Trimethroprim-Sulfamethoxazole. STEPHEN I. PELTON, PAUL A. SHURIN, JEROME O. KLEIN, AND MAXWELL FINLAND* 649

Antibiotic Susceptibility of *Chlamydia trachomatis*. H. JANE BLACKMAN, CHIEKO YONEDA, CHANDLER R. DAWSON, AND JULIUS SCHACHTER* 673

Emergence in a Burn Center of Populations of Bacteria Resistant to Gentamicin, Tobramycin, and Amikacin: Evidence for the Need for Changes in Zone Diameter Interpretative Standards. BARBARA H. MINSHEW,* HELEN M. POLLOCK, FRITZ D. SCHOENKNECHT, AND JOHN C. SHERRIS 688

Feasibility of Screening for Penicillinase-Producing *Neisseria gonorrhoeae* from Primary Culture Plates by Using a Rapid Microacidometric Test. ALICE SCHAUER WEISSFELD,* GAIL D. SANNER, JACK R. CHILDRESS, JOHN D. DYCKMAN, THOMAS W. HUBER, AND ROBERT P. WILLIAMS 703

Structural Requirements of Guanide, Biguanide, and Bisbiguanide Agents for Antiplaque Activity. J. M. TANZER,* A. M. SLEE, AND B. A. KAMAY 721

Radiometric Determination of the Concentration of Amphotericin B in Body Fluids. ROY L. HOPFER AND DIETER GRÖSCHEL* 733

Penicillins Activate Autolysins Extracted from Both *Escherichia coli* and *Klebsiella pneumoniae* Envelopes. ROBERTA FONTANA,* G. SATTA, AND C. A. ROMANZI 745

Methadone: Antimicrobial Activity and Interaction with Antibiotics. JOHN N. SHEAGREN, IBRAHIM S. BARSOUM, AND MELODY Y. C. LIN* 748

Pharmacology and Therapeutics

Polymyxin B and Rifampin: New Regimen for Multiresistant *Serratia marcescens* Infections. R. C. OSTENSON, B. T. FIELDS, AND C. M. NOLAN* 655

Use of a Photodensitometric Technique to Quantify Microscopic Lung Lesions in Mice: Antiviral Activity Against Swine Influenza Virus. WILLIAM C. HALL,* JOHN D. WHITE, AND GEORGE H. SCOTT 660

Factors Governing the Emergence of Resistance to Nalidixic Acid in Treatment of Urinary Tract Infection. DAVID GREENWOOD* AND FRANCIS O'GRADY 678

Penetration of Cefamandole, Cephalothin, and Desacetylcephalothin into Fibrin Clots. MICHEL G. BERGERON,* BACH M. NGUYEN, SYLVIE TROTTIER, AND LÉO GAUVREAU 682

High-Pressure Liquid Chromatographic Assay of Netilmicin in Plasma. GEOFFREY W. PENG, GEORGE G. JACKSON, AND WIN L. CHIOU* 707

Blood, Brain, and Cerebrospinal Fluid Concentrations of Several Antibiotics in Rabbits with Intact and Inflamed Meninges. THOMAS R. BEAM, JR.,* AND JAMES C. ALLEN 710

Clinical Pharmacology of Netilmicin. BOH-SENG YAP,* DOROTHY STEWART, AND GERALD P. BODEY 717

Pharmacokinetics of Cefaclor in Normal Subjects and Patients with Chronic Renal Failure. RICHARD BLOCH, JAMES J. SZWED, REBECCA S. SLOAN, AND FRIEDRICH C. LUFT* 730

Errata

Susceptibility to Kasugamycin of *Escherichia coli* Carrying Conjugative and Nonconjugative R Plasmids. HIROFUMI DANBARA AND MASANOSUKE YOSHIKAWA 751

Stability of Antibiotics in Wilkins-Chalgren Anaerobic Susceptibility Testing Medium After Prolonged Storage. R. J. ZABRANSKY AND K. J. HAUSER 751